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PROFESSOR PAYNE ON "PROCEEDING FROM THE KNOWN TO THE UNKNOWN."

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IN his late volume of educational essays,[1] Prof. W. H. Payne subjects to vigorous criticism some terms and phrases now current in educational discussions. His aim is to ascertain the sense in which they are used, to fix their real content, and determine how much truth they really hold. Good examples of his work will be found in his handling of "nature" and "natural," "genesis of knowledge in the race," "learn by doing," and "proceed from the known to the unknown." Imitating Professor Payne's own courageous example, we propose to review what he has himself written on "proceeding from the known to the unknown," and, in fact, to reëxamine the formula itself.

The great power of the machine tendency in human nature is seen in politics, in morals, in religion, in education — in fact, in everything. Men are quite apt to trust to the established form of government, forgetting, or at least failing to act on the principle that eternal vigilance is the price of good government. They tend to leave religion, a personal matter above all else, to the organized ministry or priesthood, at most to the visible Church.

[1] Contributions to the Science of Education. By William H. Payne, A.M., Professor of the Science and Art of Teaching in the University of Michigan; etc. New York: Harper & Brothers, Franklin Square. 1887.

They surrender the education of their children to teachers and to schools. Moreover, they repose an excessive faith in dogmas and systems, in precepts and creeds, in maxims and principles. To a great degree the machine tendency is good. Governments and churches and schools are invaluable, but they cannot take the place of personal effort. Doctrines and creeds are all important in their places; but that is no reason for expanding a half truth into a truth, for stretching a special rule over all cases, or for imputing to a dogma or maxim a mystical virtue like that imputed by the red Indian to his "medicine." At bottom the excess of "machine" is a desire to escape the labor and pain of personal effort of some sort, very often of study and thought, and this excess explains, to a great degree, the current educational cant and catchwords. Few men will think subjects out to the end; perhaps the majority are not able to do so. Such work as that undertaken by Professor Payne should, therefore, be welcomed by all thinking educators at a time when there is so much educational activity as at present. He has rendered a service to the cause of sound education, both by attempting some thorough criticism and by the work that he has actually done. But we must not fall into the power of the "machine," and hastily conclude that he has spoken finalities on the subjects that he handles. While we mean to recognize the value of his criticism in a hearty way, we feel bound to say that in his recoil from "half truths" and from "axioms that are no axioms," he has sometimes put a meaning on language that was never put on it by its originators and that is not put on it by those who use it; and that while he makes the "truth" or "axiom" mean more than it does mean, on the one hand, he withholds from it something that really belongs to it, on the other. Of this we have an excellent example in the trenchant criticism that we have chosen as the subject of our remarks. Some of his observations are both acute and just; moreover, they are timely at this juncture; but his essay, as a whole, is not by any means the last word on "proceeding from the known to the unknown," and even leaves on the mind, more through the omission of truth than the statement of error, an impression that is largely false. He says the principle "is a bit of educational cant that passes current to save the labor of thinking;" it is "partly true and partly false," is not wholly axiomatic, "but is at variance with a psychological law." We hope to

leave on the mind of the reader equally clear ideas as to the estimate in which we hold the famous Pestalozzian principle.

Professor Payne first inquires how far the principle is supported by the analogy of "the genesis of knowledge in the race." The mind of the race is the minds of the individuals composing the race; the knowledge of the race, what the same individuals collectively know. Accordingly, the mind of the race grows as the minds of the race grow; and the knowledge of the race is acquired by the same processes as the knowledge of the individuals composing the race. In no other sense is there such a thing as "race" mind or as "race" knowledge. Professor Payne is, therefore, in substance right when he says, "with the race the genesis of knowledge must have been from the unknown to the known" (to the *unknown*, a Pestalozzian would say), since each "individual of the race had nothing in the line of knowledge to begin with,"[2] provided he keeps the word "genesis" within due limits. All knowledge is not included in the genesis of knowledge thus limited, either of the individual or the race. Individuals continue to learn; and the race as a solidarity adds to its knowledge. This is what Tennyson means when he says, "knowledge grows." How does this progressive generation of knowledge proceed? Evidently the latest born individuals, like the firstborn, have nothing to begin with; but this fact does not answer the question how knowledge grows in the individual mind or in the "race" mind. To find that out, we must go to the individual mind and observe its processes of knowledge: for the knowledge of the race grows in the same way as the knowledge of the individual. Here we have a difference with Professor Payne, as we understand him. He argues that "the primal experience [of the race] is typical of the experiences that follow in the life of the child."[3] In the first place, the primal experience of the child is not the same as all its after experience, as we shall soon show; and therefore the primal race experience cannot be typical of the after experiences of the child. But more than this, it is far better to reverse the process and make the child the type of the race. Our difference with Professor Payne is simply this: He seeks in the race a refutation of the Pestalozzian maxim; we hold

[2] Ibid. p. 169. [3] Ibid. p. 169.

hold that the race throws no independent light on the general inquiry. Pascal's Colossal Man, Hobbes's Leviathan, and Spencer's Race often serve a good rhetorical turn; but such figures of speech do not settle psychological or pedagogical questions. The growth of individual knowledge and of "race" knowledge is indeed from the unknown to the known, in this sense: the child starts knowing nothing; he attains to knowledge. The race begins with nothing, the nothing becomes a little, and the little becomes much. But these facts do not show the nature of the mental processes. To find that out we must go to the individual mind.

Before attempting an analysis of the processes of knowledge, a few words on the method of study. The physiological psychologists contemn metaphysics, declaring that the mind should be studied objectively. He would be a bold man who should deny that the so-called "objective method" of mental study (which includes much more than the "physiological" method) should supplement the ancient subjective method. The primal genesis of knowledge can never be got at from the inside; in the case of every human being it antedates the dawn of reflective consciousness; and we must depend for all our knowledge of the process upon external observation solely, except as later operations of the mind throw backward their own light. At the same time, for a full and final analysis of the mental operations, we must always depend upon the introspective method of the old philosophers. As Professor Payne says, "mental phenomena will forever escape the senses of sight and touch;" they must be studied, as "they have always been studied, by the mind's own reflective effort;"[4] but it cannot be denied that the objective philosophers are causing us the better to understand the mental life and history of young children.

We are now ready to inquire concerning the origin of that mental furniture which we call knowledge.

I. *The origin of simple ideas.* — The child is born with faculties but not with ideas. His intellectual faculties, working on sense impressions, generate his first knowledge, which consists wholly of ideas of single things. But the child grows, and as he grows his stock of simple ideas increases. How are these new

[4] Ibid. p. 125.

ideas formed? Many of them are formed in the same way as the earlier ones, but not all of them. The early ideas aid in forming the later ones in two ways. First, they add to the child's intellectual power, and second, they tend to generate ideas like themselves. In forming new ideas the mind acts, as before, upon sense impressions, but with more power and facility; that is, the child now reaches the unknown by way of the known. Perceptions are the mind's interpretations of acts of sensation; and the power to perceive grows through perceiving. We cannot, therefore, agree with Professor Payne when he argues, that, since the new sensations of the child are simple, and since his general process of knowledge is ever the same, and since each new object is a new unknown, therefore, in interpreting these sensations "he derives no help from previous sensations." Still less can we agree with him when he argues that even when the new object is "composed of parts that are really contained in objects previously known," no help can come from the former objects because, "as first impressions are always confused, these parts are as yet not determined, and so cannot be used to analyze the new unknown."[5] Undoubtedly for a time there is great confusion and an inability to discriminate, and so failures to recognize the old in the new; but this state of things soon begins to give way, and progressively the recognition of the old in the new becomes a great help in acquiring knowledge. It is clear that ideas generated in the primitive way materially assist the mind in forming new ideas of things that are similar. It is clear, too, that so far forth the order of procedure is from the known to the unknown. We do not forget that Professor Payne is speaking of the primal genesis of knowledge; but the Pestalozzian principle that we are investigating does not relate to such genesis.

II. *General ideas, concepts, or notions.* — This is the admitted order of the mind in forming general ideas: (1) *observation*, the noting of single objects; (2) *analysis*, the separation of these objects into their component parts or qualities; (3) *abstraction*, the withdrawal of some common part or quality from all the others; (4) *generalization*, the affirmation of this common part or quality of all the objects observed. It is clear that this process leads up to something new; the objective basis of the notion or concept existed in the objects of the class examined, but its

[5] Ibid. p. 169.

existence was unknown when the inquiry began, and becomes known only when the inquiry is finished. It is also clear that the procedure is from the known to the unknown. Professor Payne quotes Dr. Reid with approbation. "As soon as the child can say with understanding that he has two brothers or two sisters; as soon as he can use the plural number, he must have general ideas."[6] We may add, the child certainly begins to proceed from the known to the unknown as early as he begins to form general ideas.

III. *The proposition.* — The proposition is the expression, in words, of the mental act called judgment. It consists of a subject and a predicate; and the second can never be predicated of the first until its predicability has been discovered. And predicability has to do with the meaning of the terms and their relation to each other. How the ideas conveyed by the terms originated, has been answered already in treating of ideas. But how is the relation called predicability discovered? Evidently by a comparison of the terms, or the things for which they stand; comparing two known things, that is, we learn a new fact.

IV. *Elaboration, or reasoning.* — This is of two kinds, deduction and induction. Deduction adds nothing to our knowledge. The syllogism, which is the perfect type of deduction, is but a formula for the effective presentation of what we already know. Mr. Fowler says it is "an inference in which one proposition is inferred from two others conjointly, the inferred proposition being contained in the propositions from which it is inferred."[7] The first thing to be done is the discovery of the relation of the middle term to the two other terms, and this discovery is in harmony with the Pestalozzian rule. Induction, the logical instrument of discovery, Mr. Fowler defines as the "legitimate inference of the unknown from the known, that is, of propositions applicable to cases hitherto unobserved and unexamined from propositions which are known to be true of the cases known and examined."[8] Analogy also leads us from the known to the unknown, but we need not inquire concerning its nature. Reasoning, then, so far as it adds anything to knowledge, conforms to the maxim. Indeed, the maxim is the very type of reasoning, as expressed in the time-worn question: "How can we reason but from what we know?"

[6] Ibid. p. 79, note. [7] Deductive Logic, p. 80. [8] Inductive Logic, p. 7.

More attention need not be given to that original knowledge which comes from the reaction of the senses on external objects, from introspection, or from reasoning, and which excludes all testimony or authority. Professor Payne very truly says that "it is only a small part of what we need to know that we can acquire by original discovery, or even rediscovery. There is knowledge" — and by far the larger part of knowledge — "that must be gained at second-hand, if gained at all."[9] But while our first-hand knowledge is small when compared with our second-hand knowledge, it is indispensable to the existence of second-hand knowledge. For example, the knowledge that comes through the senses interprets verbal descriptions of sense things, no matter whether put in oral or in printed words; and our subjective experience interprets all verbal accounts of the similar experiences of others. We can have no second-hand knowledge of sights and sounds, for example, but can, by the imagination, combine these original elements in new objects of knowledge. The child and the man in this way learn the unknown by means of the known. The houses that we have seen help us to conceive the golden house of Nero; the fires that we have witnessed assist in imagining the conflagrations of Rome and Moscow; the ships that enter our harbors represent to us the Invincible Armada; the bridges that we have crossed stand for the Rialto. Here, too, we get the educational force of the words "as" and "like." It suffices if the new thing belong to a class similar to the old class. Thus, when one reads in the dictionary that the small concave ivory or hardwood shells composing a castanet are "like spoons," he learns something if he has seen a spoon but has never seen a castanet. But words mean nothing unless they touch our own outer or inner experience — what we have seen, heard, felt, or thought. If we find the words of a definition as meaningless as the word that is defined, we must go farther back until we find something of which we have first-hand knowledge. In a very important sense, therefore, a man is a part of every item of knowledge that he acquires. The process by which we gain our later knowledge cannot be better described than in Professor Payne's own words: "Out of a comparatively few primary notions, by combination and permutation, the mind is furnished with an almost infinite

[9] Contributions to the Science of Education, p. 91.

variety of new constructions. New knowledge is but a new combination of old material, and most of our thinking consists in discovering or establishing relations between part and part, and even containing wholes." [10] But this is proceeding from the known to the unknown. In learning spiritual things, states and operations of the mind, we are especially dependent upon the known. First of all, the objective facts of nature and human life interpret to us the subjective facts that are like them. Not only so, but material things are analogous to spiritual things. It was Jesus's marvelous skill in handling the "likes," in great part, that enabled him to put more ethical truth into his parables than can elsewhere be found in the same quantity of matter.

How far the Pestalozzian rule conforms to the facts in the generation of knowledge, we have now shown. It throws no light whatever on the *primal genesis* of knowledge; but, in its progressive genesis thereafter, it may almost be called a controlling principle. But we have never understood that the principle is an explanation of primal knowledge. Nor is primal knowledge the thing in Mr. Spencer's mind when he lays stress upon the genesis of knowledge in the race. This will be perfectly plain to any one who will read pages 122–124 of his "Education." Again, we have always supposed the maxim to be a working rule for teachers, who have nothing whatever to do with the primal genesis of knowledge in the child or in the race but to assume it as a starting point for their work. Thus conceived, the rule means this: "Take the child where you find him; seek him where he is; discover what he knows; and, facing to the front, make the known the basis of operations against the unknown." The law of mental growth is the law of the conditioned and the conditioning; and our principle is a very commonplace of the didactic art in all its forms. The maxim belongs to the teaching art rather than to the science of education.

Such is our conception of proceeding from the known to the unknown. And we submit that while the rule cannot be taken like a mathematical axiom in an absolute sense, it cannot be thrown aside as a bit of educational cant. Cant it may be, in some mouths; but anything pertaining to education, morals, or reli-

[10] Ibid. p. 81.

gion is cant to those who make it so. When Professor Payne suggests that at first the maxim meant: "Teach an unknown language by way of a known one," he himself admits that originally it was considered a working rule and not an explanation of primal knowledge; moreover, whatever truth there may be in his suggestion, it is now impossible to restrict the maxim to that use.

So far as we have observed, the view that the Pestalozzian gives the teacher a working rule and not an analysis of knowledge is substantially the view commonly taken of the maxim. Thus Mr. Quick says: "The traveler who is describing what he has seen, and what we have not seen, tells us that it is in one particular like this object, and in another like that object, with which we are already familiar. We combine these different concepts we possess, and so get some notion of things about which we were previously ignorant. What is required in our teaching is that the known should be employed more systematically." [11]

How near the Pestalozzian rule comes to conforming to the mental processes throughout is well shown by Professor Payne himself in his formulation of the law of normal sequence of mental progress: "In infancy, from the unknown to the imperfectly known; in childhood, from the imperfectly known to the better known; in maturity, from the better known to the well known." [12] Granting the point of view, this statement cannot be improved upon; but a Pestalozzian looks forward and not backward, and so would describe the line of march as toward the unknown. And yet Professor Payne insists that "the dogma," as he calls it, is in direct conflict with a normal law of mental growth, that Sir William Hamilton thus states: "The first procedure of the mind in the elaboration of knowledge is always analytical. It descends from the whole to its parts, from the vague to the definite." [13] Elsewhere Professor Payne states the law in these words: "The first reaction of the mind upon the presentations made to it is always analytical." [14] This is unquestionably a mental law, and we must consider its bearings on our subject.

Knowledge begins with analysis, but it does not end with analysis. At one stage the mind analyzes, at another it synthetizes; at one time it descends from the whole to its parts, at

[11] Educational Reformers, p. 246. [13] Contributions to the Science of Education, p. 169.
[12] Ibid. p. 170. [14] Ibid. p. 78.

another it ascends from the parts to their whole. Analysis is the first reaction of the mind upon an object presented to it, synthesis the last reaction. This is expressly taught by Hamilton. Perception is a unifying act, because it unites all the parts of a scene presented to our senses into a perceived whole. And so imagination, generalization, judgment, and the syllogism are all unifying acts.[15] What follows? The child must first learn wholes and not parts. But there are wholes and wholes, parts and parts: the whole of one object of knowledge is the part of another object, and *vice versâ*. Hence the question is important: "What wholes should first be presented to the child?" Because the child knows in a vague and indefinite way a brick wall before he knows the single bricks and the seams of mortar composing it, shall we, therefore, present to him a whole house as a first object of knowledge? Shall we present to him the earth, the solar system, or the physical universe? There can be no doubt that the child forms his idea of a house, or of the earth, by both analytical and synthetical acts. In the case of the earth, he seizes first a small part that is to him a whole, and separates it into its parts and then unites them; he does the same for a second part-whole, and for a third and a fourth. He may continue this process to the end, ascending step by step until at last the globe is reached; or, after carrying it on a certain distance, he may overleap the remaining steps and, seizing upon the globe itself, proceed analytically. It will hardly be questioned that the child reaches the earth by way of its parts, the solar system by way of the earth, and so on.

Here we touch a point upon which Professor Payne lays much stress. One of his objections to proceeding from the known to the unknown is that the maxim is made a warrant for the constructive or synthetic method of teaching geography. This method he characterizes as "proceeding from the schoolyard to the township, from the township to the county, from county to hemisphere, and finally to the globe."[16] Would Professor Payne reverse this order? Would he, if he could, have the child begin his study of nature with the globe and descend by way of the hemisphere, the continent, the state, county, etc., to the dooryard and its contents? Perhaps the globe should be a pupil's first formal geography lesson; that will depend upon his

[15] Metaphysics, lecture lv. [16] Contributions to the Science of Education, p. 168.

preparation for the study. But we need to pay attention to the primal genesis of geographical knowledge. The fact is, the child's real instruction in geography begins, especially if he live in the country, long before he goes to school at all, or even hears the word "geography" pronounced. That is, he learns those primal elements of geography — earth and sky, land and water, mineral and vegetable, schoolyard and township, and many more — that he can learn only by personal experience, and without which he can never understand geographical descriptions at all. Now, if the child has a large knowledge of yards and townships and counties and what is in them, especially if he is gifted with a good imagination, and has read or heard a good deal about the earth, into the bargain, then the wise teacher may at once give him the globe as a lesson; if, on the other hand, the child has had a small experience of this sort, and, consequently, has a slender stock of primal knowledge, then it will be better to give him some smaller wholes, possibly even the schoolyard or the township, first, and then to lead him along the analytical-synthetical road for a time, before placing before him the grandest geographical whole. But the thing to do is to discover what he knows and then to be guided by this discovery. But whatever may be best in a given case, this is the great point: The pupil's real introduction to geography long antedates his introduction to book-geography; it has its rise in his primal ideas of sense-objects, and expands in those ideas and concepts of natural things that are proximate to all book-learning, and particularly so to the sciences that deal with external nature. In this sense, instruction in geography must proceed by the way of the yard, the farm, and the township to the earth, and the attempt to reverse the process, no matter by whom made, will end where it began.

HENRY WARD BEECHER AT SCHOOL, COLLEGE, AND SEMINARY.

BY GILMAN C. FISHER, OF WEYMOUTH, MASS.

I HAVE turned with deep interest to the ten years that the great prose-poet, preacher, and orator who has now gone to his rest passed within the walls of educational institutions just before entering upon the work of the ministry. I have felt sure that within this formative period, obscure though it might be, I could find some clew to future greatness that the student of ethics or of history would esteem valuable; or at least could put upon record some facts and anecdotes not devoid of interest at this time.

Mr. Beecher fitted for college at the Mount Pleasant Classical Institution, Amherst, Mass., which he entered in 1827, at the age of fourteen years.

The school was upon a grand scale for those times. There was a native Spanish teacher, a native French teacher, a native Italian teacher, and, not of least consequence (so the boys thought), a French cook to furnish beef *à la mode* and provide dainties almost of the Delmonico order. It aimed rather at Orthodox patronage; the Round Hill School, at Northampton, having more Episcopalian and Unitarian patronage. Ministers' sons were taken at reduced rates. Dr. Lyman Beecher, the father of Henry Ward Beecher, particularly befriended the institution. "The *élite* of the vanguard of the world's redemption" were represented at it.

To receive his full share of the punishments which, in the pompous nomenclature of the school, were termed *poenas* and *pensums;* to be watched by the prefects and subprefects, who assisted in the management of the school; and not unfrequently to be incarcerated in the "dungeon,"—a large closet-like place under the platform, where the boys passed Saturday afternoons for misdemeanors during the week,—came our young hero from Boston. He was not particularly prepossessing at this time. In personal appearance he resembled a butcher's boy quite as much as a doctor of divinity's son. His head, which in subsequent

years grew and developed to a wonderful degree, did not then show many signs of strength. His nose was not sharpened, as afterwards, but rounded much as in earlier photographs. His lips were thick and rather hard for the muscles of the mouth to manage. His eyes, though now and then lit up with promises of the future, were oftener dull and sleepy-looking, or, at best, but fun-excited. He was stocky built, with a swing to his shoulders that indicated their adaptability to striking out. He was constructed for running, climbing, and wrestling, of all of which exercises he was very fond; but, though play absorbed him most, there were times when he seemed stirred by the spirit within him: when he grew silent: when the mountains were transfigured: when the clouds became more than clouds to him: when the rocks, the flowers, the dew, inspired him: when the forests seemed no longer a place to be hallooed in, but a place to kneel and pray in.

He was, in short, a boy with *mitigations* — a young animal, opaque, with a groping for light. "Spells" of introspection would seize him during his most exciting pastimes. Even when he was leading an attack upon a snow-fort, or building a dam across a brook, it was no uncommon thing for him to become lost in reverie. On these occasions he would draw down his face like a deacon's and let not the faintest smile cross his lips. It seemed as if the unknown monitor who presided within had struck with his gavel a blow that arrested the flow of animal spirits and revealed to the idler his destiny.

Possessed of a lion-like courage, he was magnanimous and forgiving and disposed always to take the part of the weak against the strong. Full of life and vitality and hard to be restrained, he was nevertheless a principled, big-hearted boy with a religious side to his nature. Leader in frolics, practical advocate of woodland and meadow strolls, gymnast and tree-scaler, — as likely to be riding one of the professor's horses over bogs and brooks as poring over his Latin text or Greek exercise, — he was always ready for feats of strength and daring, but he was never mean in spirit nor depraved in conduct. There was no taint about him. He was not hypocritical. He would not lie. All his companions agree in saying this.

At Mount Pleasant he preached his first sermon, nearly sixty years ago. It was on the occasion of a great revival in town, when, being very much interested, he called five or six of the boys

to his room and, selecting the text, "Pray without ceasing," exhorted them to stand up for Jesus and give their hearts to Christ. It was a touching and eloquent, though boy-like, appeal, which those who heard it will never forget. On that Saturday afternoon his companions became aware of the spiritual undercurrents of his nature — the irresistible aspirations that were born in him and ordained him preacher at the natal hour. Said he in later years: "I have always been glad I chose the ministry of the gospel of Christ as the business of my life. My work has been a joy to me all the way." It was a joy that he felt for the first time then, when, giving up his idea of being a great naval commander, — an idea developed in Boston and fostered by the sight of the wharves and seafaring people of a great commercial town, — he transferred all his chivalric intentions to the ministry. He became a Christian, or *more* a Christian then. It was the turning point of his life. The seed, deep buried in the crust of an undeveloped nature, waked up, as it were, in the winter time and wanted to expand. While his father's thundering controversies with Channing were going on, he took up the cudgels for Trinitarianism in little coteries at Amherst, and, wielding them with vigor and skill, was soon looked upon as a champion in polemics. Speaking of Christ's knocking at the heart, he said: "That 's a *pretty* thing for a mere man to do!"

In 1830 he entered Amherst College, with a good fit in the classics, but distinguished for his dislike of mathematics, in which, however, he had had an excellent training under a young Professor Fitzgerald, between whom and himself a warm friendship had sprung up. "Like a man walking through a forest-clearing," says one of his classmates, "he *stumped* around propositions." He used to call his mathematical books "pain-killers" and "counter-irritants," declaring that he could cure the rheumatism or the toothache by applying one of them to the affected part. At Cincinnati he startled the theological students once, by declaring that he did not want to go to heaven if they had mathematics there! Among his numerous contributions to the college papers is one in which he ridicules the stupidity and narrow-mindedness of mathematicians, who can see no beauty in a poem or a work of art, simply because it proves nothing, and quotes Benjamin Franklin's description of a member of the Junto Club, in support of the statement that those who excel in mathematics are apt to be very disagreeable people, good at nothing else.

But he dearly loved metaphysical studies, literature, phrenology, and elocution. For three years at Mount Pleasant he had been incessantly drilled in posturing, gestures, and voice by Prof. James E. Lovell, author of "The United States Speaker," and a distinguished teacher of those days. Thanks to this gentleman, he became an admirable declaimer, his bold and fervid style of rendering a selection from the first and second chapters of the book of Joel exciting the universal admiration of his classmates, who, again, in his personation of Gesler in the play of William Tell, thought him one of the greatest actors of the age. The training at Mount Pleasant was supplemented at college by solitary speaking in the woods, active participation in the debating clubs, the conduct of religious meetings in the schoolhouses of the neighborhood, and the delivery of public addresses on temperance and other subjects, — exercises and habits, all of which were afterwards resumed on Walnut Hills, Cincinnati, — so that when he was ready to enter the ministry in Indiana, he had had more practical experience in the art of oratory, and paid more attention thereto, than most congressmen when they go to Washington. He became a "natural orator" by conquering nature, and not because he needed no preparation and made none. The voice that the editress of "Life Thoughts" describes as having "the high battle-cry of the trumpet or the clarion, and all the touching gentleness of the mother's cradle-hymn," was an acquired or reconstructed one; and the superb manners of the man whom another admirer describes as "observing all the proprieties of the stage and never, in the wildest energies of declamation, falling out with nature," were his by no birthright.

Lazy students at Amherst hold him up as a patron of idleness. He was not. As he studied elocution, so he studied everything else that he thought would aid him, and whatever he did, he did with all his might. It is true he disdained college honors and had no "part," talking contemptuously of diplomas, and declaring a sheepskin with the skin on quite as good as a sheepskin with the skin off — although this may have been a sort of proviso of contempt for the blue-ribbon documents in case he did not get one. At the very beginning of his course he determined upon a plan of study of his own and pursued it vigorously in spite of all example, precedent, or advice. He saw that a practical education is not necessarily a scientific or classical one. He felt the need of an

education of distinct designs for the great army of literary men of which preachers and other public speakers are the wings; and, keeping clearly in mind what he had to do in the world, he ran one of the most active and remarkable, consistent and profitable, college careers on record. It served to build him up and round him out and make him, not so much like Shakespeare, whom, indeed, he resembled, as Victor Hugo, a typical citizen of a great republic, and a many-sided, broad-based man.

He was an omnivorous reader, and nothing came amiss to him, from Ossian to an almanac. "Milton's prose works, Bacon, Shakespeare, and the writers of the Elizabethan period were his classics, read and reread and deeply pondered. In common with most young men of his period, he was a warm admirer of the writings of Robert Hall." He delighted in those old sermonizers who abound in metaphor; the British and American authors; the playwriters, Ben Jonson, Massinger, and Ford. He found the greatest entertainment in whatever came under the head of heroic-historical. In poetry, which he read extensively but which he has never quoted to any extent, — poetry would impair the effect of one of his sermons just as a D.D. would impair the effect of his name, — his loves were a little singular. One obscure old poet, Daniel, was the especial object of his affection; the portion of the book containing the poem in which are found the lines,

> "He who hath never warred with misery,
> Nor ever tugged with fortune in distress,"

being worn with his fingering. Naturally enough, these lines struck the keynote in the nature of a man who, in after-life, used to prefer, in railroad traveling, a ride on the engine to a seat in the cars. Phineas and Giles Fletcher, upon whom he wrote a dissertation, came in also for a large share of his affection and esteem.

Becoming a devotee to the science of phrenology, and numbering Prof. O. S. Fowler, then a student at Amherst, among his disciples, he gave a great deal of attention to this subject, opened correspondence with his brother George, examined heads, made busts, and formed a phrenological club. Procuring Magendies' Physiology, he read it in this connection. Gall, Spurzheim, and Combe were at his right hand. Nor were these all. Regarding phrenology as a comprehensive science of the mind and not a

mere science of "bumps," vulgarly so called, he read Locke, Stuart, Browne, and Reid. He lectured also, delivering three lectures on this subject before the village lyceum. At one of these, holding up a suspicious looking object, he spoke as follows: "Ladies and gentlemen, this is a calf's head. But for me it would still be upon the calf's shoulders; but I gave the butcher a dollar to cut it off. I have done so in the interests of science. I want to show you how it is there are so many calves among the human species," etc. It is needless to say that he had even then the power to make an audience hang upon his words.

The amount of missionary work he did while in college was simply enormous. Mr. Beecher himself writes: "My earliest remembered address was given at Brattleboro', Vermont, on temperance, when I was in my junior year at Amherst College; but my earliest remembered sermons were delivered at Northbridge, Mass., where I taught school for three months in 1831. I conducted a conference meeting almost every night. . . . In the winter of 1832 I taught school in Hopkinton, Mass., and carried on revival meetings every night and preached on Sundays. The people were plain and simple and liked the effusions. During the winter of 1833 I again taught school at Northbridge, and made a formal sermon in the chapel over the new store built by the Messrs. Whitin." During the greater part of his senior year he held a Sunday evening prayer meeting in a little schoolhouse in the outskirts of the village, and in 1834 delivered a Fourth of July temperance address in Amherst.

Some of the characteristic sayings of these days have been preserved to us. Speaking of the proneness of people to misjudge college students, he said: "A man may change after he gets out of college, — a poor scholar acquiring note perhaps, and a good one perhaps acquiring none, — but *a sneak in college stays sneak for life*."

He criticized the essay of one of his classmates who used too many words in introducing his subject: "Your porch is too big for your house." He whispered in a church choir at the close of one of Watts's hymns calling on all nature to praise God: "We have sung the whole menagerie." He exclaimed in a burial ground thickly planted with graves: "What a scrambling there will be here resurrection morn!"

The room he occupied was a curiosity shop. In the centre stood

a large circular table with a hole in the middle, where he sat, so that everything might be within convenient reach. When he wanted to begin work, he dropped down on all fours, crawled under to where the hole was, thrust his head up through, drew his body after it, and concluded the performance by sitting down upon a stool. In other words, he dove for his domicile, like a beaver, and reappeared inside. The only difficulty arose in winter time, when he could not sit near the fire, so as to be comfortable, or the great pine table would be in a blaze. Frequently he was discovered in this central position, with his cloak buttoned up to his chin and his cap on, a most ludicrous picture of comfort under difficulties. Books and papers were piled upon this table in unutterable confusion. Chiefly in one corner of the apartment, and vying in vagrancy with a scattered wood-heap, were various articles of wearing apparel, an old pair of trousers or two and a cobwebby waistcoat; in another corner were phrenological busts new and busts in making, and chunks of lime and a pail with rags; and in another, brooms, brushes, and other student necessaries. The windows were adorned with spider-webs and inhabited by former denizens of stone-heaps — abnormally large and exceptionally hideous creatures he had secured during his strolls in the neighboring fields. One of these he called Van Buren — Van, for short.

That apartment was *his;* sometimes he was in it, trying to restore it to order, but oftener he was out of it, exploring the beautiful region in and around Amherst. Here in the great outdoors he developed that love of nature and acquired that habit of observing it which attended him through life. Sometimes he climbed the mountain-sides or watched the sunrise from the college belfry. Sometimes he walked the lone forest paths, slippery with fallen pine needles: listened to the noisy songsters in their leafy haunts: lifted the heads of pale wild flowers and gazed into their sweet faces: studied the mosses upon ledges of rock: watched, perchance, the conflict of two ants for the possession of a worm, or threw himself supine upon a bed of leaves. No one knew the country roads — where they were hilly or flat, where they were crooked or straight, where they were gravelly or sandy — better than he. No one knew where lay the greenest meadows, where waved the fairest woods, better than he. Nature was the instructress most cherished and sought by him during this molding

period of his life; and his Alma Mater, with a true appreciation of his wants, did not see fit to interfere much with the more potent and attractive sway exerted over him. He was a privileged character even in those days.

At one time the tutor in mathematics, who was very tall, came to remonstrate with him. Mr. Beecher, who had somehow got wind of his coming, removed all his chairs but one and sawed off several inches from the legs of that one. The tutor entered, and, taking the only seat that presented itself, stretched out his legs half-way across the room. The sight of them confused him so — for he had never before beheld them to such advantage (or, rather, disadvantage) — that he could not find it in his heart to reprimand the engaging young man.

In 1834 he entered Lane Theological Seminary, Walnut Hills, Cincinnati, during the second year of his father's presidency, and remained there until 1837.

Upon debatable frontier ground, where Old School and New School contended, and where free soil and slave soil looked at each other across the Beautiful River, this institution was a kind of theological outpost which drew together the most incongruous elements in the then undeveloped West. Thither flocked the young and middle-aged, the radical and conservative, the jolly and ascetic — those for whom apostleship is a grace and those for whom it is a malady and a burden. The latter would sometimes ask our young "Theolog.," by way of censure for his unconventional manners: "How would St. Paul have looked, *how would Jesus Christ have looked*, a-climbing a hickory tree for nuts?"

Here, as at Amherst, he was constantly looking forward. He seemed to hover about recitations — never to enter into them, except, perhaps, to battle with his father, who used to say to the students: "Don't be afraid to ask questions because I sit in the armchair; trip me up if you can." He was behind in regular classwork. He could not work in harness — as well harness a gazelle to a dogcart or a lion to a dray. He shirked Hebrew, systematic theology, Old and New Testament exegesis, ecclesiastical history. Often coming to these recitations consciously unprepared, he would lug in some doctrine, phrenological or other (witchcraft served for quite a while under Professor Stowe, until the latter discovered the dodge and proceeded to give his brother-in-law a piece of his mind), and, starting a discussion thereon,

succeed in not getting "called up." The prescribed studies were irksome to him. They belonged to an outgrown past, and, while they might afford some nourishment to weak natures, they were a distasteful and diluted tonic to him who had already begun to look ahead, longing for the future with all its possible turbulence, jeopardy, and straits. His situation at this time was a peculiar and stirring one. Placed in the midst of active and opposite natures, during fierce times and in a comparatively new country, his character developed under these circumstances and he longed to engage in the real conflict of life. Accordingly we find him availing himself of every permissible latitude, and thinking solely of what would aid him, when, in that wild country of corduroy roads, he should go about "shooting sinners on horseback." He worked prodigiously in his own free and untrammeled way. He wrote much and read much, running up a large account for books, which he kept in a tall and stylish bookcase. His part in the literary societies was as active as ever. Night after night he would dash away to try his skill in debating with some hard-headed old blacksmith, perchance, or to hold a meeting in a wayside chapel or cross-roads schoolhouse. He devoted no small share of his time to a Bible class he taught in Cincinnati, and, during the absence of Mr. Brainerd, editor of *The Cincinnati Journal*, the organ of the New School Presbyterian Church, conducted that paper with signal ability for several months, winning golden opinions from its anti-slavery supporters for the brave words he spoke at the time Birney's press was destroyed.

Such, in brief, was Henry Ward Beecher at school, college, and seminary. He was a preacher in his teens. There was no eruption of greatness in his career, simply a slow unfolding of powers and steady accretion of strength. He struck hot blows for humanity, and died, as he had hoped to die, with the glory of his manhood full upon him.

A MOTHER should desire to give her children a superabundance of enthusiasm, to the end that, after they have lost all they are sure to lose in mixing with the world, enough may still remain to prompt and support them through great actions. A cloak should be of three-pile, to keep its gloss in wear. HARE.

METHODS OF INSTRUCTION IN CIVICS.

III. — HIGH SCHOOL OR ACADEMY METHODS.

BY PROF. JAMES E. VOSE, A.M., OF ASHBURNHAM, MASS.

WHEN we come to the high school and the academy, these subjects are approached from different standpoints and the methods are largely changed. Before this, while we have been studying systematically, we have not been studying system. Now we gather up the scattered threads and weave them into the beautiful fabric that we call Science; we investigate not merely facts but causes and results, the relations of things, general principles, summaries that one can grasp and hold and use through life. This is what this science and art of civics should now give in this higher stage — summaries, conclusions, some of the philosophy of the subject, as well as mere facts and figures. For some of the branches of civics, as ethics, civil government, political economy, we already have provision and textbooks in our high school courses. Of political history, however, there is yet little, and of elementary law nothing. Even these established courses and textbooks are yet in the crude and experimental stage; we have no settled methods in any of them, as we have in chemistry or geometry. But able educators are working at the problem, and it will shortly be solved, to the great enlargement and advancement, I feel sure, of our system of popular education. It would be impossible here even to glance at the methods that should prevail in all these different subjects of civics; but they should be live, practical, everyday views, and not mere dry details of textbooks. To illustrate all, it will be sufficient to examine very briefly the high school methods with civil polity.

Our present advanced teaching of government is largely defective, and mainly in two directions. Many teachers present the subject in simple and childish ways suitable only for the lower grades, and so gain a sugar-candy sort of result that speedily dissolves and leaves no trace. Others, again, go to the opposite extreme, and thrust into the scholar's hand a heavy textbook on the Constitution, which he only half understands and little appre-

ciates. The fortunate inventor of *the* method with civil polity will strike some happy mean between these extremes. It is to be regretted that among the many excellent books on the subject there is not one adapted to the work which the instructor in civics has in hand. The teacher must be a law unto himself, and, fortunately, the subject is of such a nature that the best of work may be done without a classbook, though a good one would save the teacher a vast amount of labor. The instructor must combine many books and be thoroughly informed on the subject. He must also have a definite plan in his own mind — a plan of the subject, as a whole, as it stands as a science, and a special working plan of each part in particular and of the methods by which each is to be presented to the class.

For purposes of instruction as both logical and convenient, the subject may be divided into four parts: (1) Introductory. (2) Local and State Governments. (3) The National Government. (4) Some Special Rights and Laws. The time allotted to this study must of course vary much with different schools.

1. The object of this introduction is to give a general view, to teach fundamental principles, as related to the subject: of society; of rights and their classification; of law: its necessity and nature; of government: what it is; of sovereignty and the nation; of the different forms of government. From this will be seen at once the primary importance of this branch of the subject: it underlies all the rest.

First, Society. By straightforward question and conversation let us lead up to the fact that man is a social being, and that, in proportion as society is well organized and its members submissive, is man's condition happy. We should not fail to gain two things: first, a clear view of the family as the unit of society, and second, a large view of society itself, each one working for all the rest, all working for each one — the inter-dependence of man, the universal brotherhood.

Then, living in society, is there anything to which the individual man has a right as against all others? Yes: life, liberty, property, security, the pursuit of happiness, and so on. Get at the idea of rights and how far they go. What rights has society as against the individual? Gain a good classification of rights; as, natural, civil, political. And just here is a good place to make the distinction, once for all, that political rights are not necessarily natural

rights: for it is the woful mistake of many agitators at the present time to consider them so.

How, in society, does law come in? What need of laws, and who is to say what they shall be? What is the nature of law, and what its limitations from both a moral and a social point of view? Here Hobbes's old theory yet reigns supreme, that man is a fighting being and that laws are necessary to restrain him. It should be shown that law would be necessary even among the saints of the millennium.

And now Government. Through whom does society carry on its affairs — make and execute its laws? Do not fail to let it appear that government is not a man, or men, with authority over the rest to rule and direct them, but an instrument which society creates for its benefit; the servant, not the master; of, by, for the people, and not over them. We should not fail also to let it appear what sovereignty is and where it resides. Let it be shown, if possible, that the nation is an organism, a moral body; that as such, composed of individuals, it is prospered for good and punishable for evil; hence, that "righteousness exalteth a nation, but sin is a reproach to any people." Finally it may be shown what different forms of government have been adopted in different stages of society and among different peoples and nations, and also the nature and peculiarities of each and the best forms for given stages of human progress. It may appear that republicanism is not necessarily the best form for every land to-day, or even for all so-called civilized lands. It certainly should appear what socialism, communism, anarchy, are, and the dire, not to say awful, results of attempts at any such organization, or rather disorganization, of society.

I have dwelt upon this part of the work because, as you see, it is radical; it is the solid stone, or else the sinking sand, that underlies the whole superstructure. Hence I would say, dwell upon it; recur to it continually; and at the end of the study, with all the light that has been gained, return to it for still more thorough and comprehensive review. Society, government, the nation: I do not believe that any class of men has such power and privilege — shall I not say duty also? — committed to their trust as the educators of our country, to instil right views upon these great subjects; to shape the current of popular thought, at its source, with the young, and so most effectively to counteract

the political delusions which so many are embracing, to the destruction of both themselves and the body politic.

2. This foundation laid, we are in a position to enter upon the intelligent study of our constitutions and political machinery. The second division of the general subject, as stated above, would be our local and state governments. This ground has been largely covered by the grammar school course and so only needs, at this stage, a careful review and summarizing from a somewhat wider standpoint. If, as occurred at our last fall election, numbers of intelligent citizens, including clergymen and teachers, are brought before the courts for illegal voting and plead ignorance in justification, it would seem that we cannot go much too far in multiplying our instruction upon these things in every grade of our schools.

Some excellent manuals treat of both our state and national institutions together under the same heads. But state and national taxation, state and national elections, executives, legislatures, judiciaries, and the rest are so distinct that I am firmly convinced that it is much simpler and more logical to treat them separately. We have not good textbooks, but in Massachusetts three books are indispensable on the teacher's desk: the Public Statutes, with the laws since passed; Herrick's Town Officer, and the Manual of the Legislature. To these may perhaps be added the immortal Thomas's Almanack, for its court calendar. Thus equipped, the teacher begins on the best-known ground, the town or city where he lives. For brevity, merely, let us take the town for illustration.

What is a town? by what authority constituted? its officers and their duties? Let me urge that here, as all through, we want *exactness;* general views and treatises are worse than useless because they give a feeling of knowledge when there is none. *Just* what are the officers in *your* town — their names and their duties? Send one boy or girl to the deskbooks to look up and report to the class on selectmen, another on town clerk, another on assessors, overseers of the poor, and so on. How are these officers elected or appointed (town meeting)? How qualified (oath, bond, etc.)? Appoint, or let the class elect, the proper officers — clerk, selectmen, registrars — and have a regular town meeting. See to it that the registration, warrant, and all the proceedings are strictly in accordance with practice — would

stand law if brought to the test, as some in practice unfortunately do not. Administer the usual oaths, changing "swear" to "promise" and omitting "so help you God." Elect officers; vote money for schools, highways, etc., and go through exactly the main work of an ordinary town meeting. This may take up the time of a couple of recitations, but it is time well spent. Nothing so stimulates a class as this actual work; it is the laboratory of civil polity. Should any serious mistakes occur the first time, it may be well to repeat the work and have it right. Such an opportunity rarely occurs in school life to inculcate perfectly accurate adherence to legal forms, and it should not be neglected. If time permit, let other actual work be done, as assessing taxes, laying out a highway; but be sure at any rate to discuss the whole matter of town polity till it is thoroughly understood.

After this, I would take up more briefly the examination of some one city government — the city nearest at hand. Procure the last annual city reports, and let two or three students work up and present to the class its organization and methods of conducting affairs. Note the resemblances and differences between town and city, the direct influence of the people in each, the relative facilities for rings, extravagance, etc. In this connection, divisions of towns and cities should be discussed: wards, village precincts, divisions for fire, water, school purposes, etc. The county, in New England, is a minor matter and may be briefly dismissed. When the students fully understand the municipal systems of their own vicinity, it may be well — but not till then — to show them how the same things are managed in different sections of the country. But care must be taken to avoid crowding and confusion.

With the advantage gained by so much study, we are now ready to examine the State. Here we come to a new thing — sovereignty, constitution. Hence we begin with the state constitution. What is it, and how framed and adopted? Then, each part in its order. What is this Bill of Rights, and why such careful safeguard? What are the various departments of a government, the offices of each, and their modes of election, duties, etc.? I have no space for details, but would bring in as much of real life as possible. Hold a regular fall town meeting for the choice of state and county officers. Procure some actual ballots; possibly we might borrow the actual and wonderful ballot box. See that

the canvass and return of votes are correctly made, and do not permit a recount to change the numbers, as is so often the case in practice, or let the town clerk get left, as he sometimes does, in making the returns for his representative district. The daily paper may be preserved in which the council publishes its annual report of the state elections; it will be interesting reading at this time, if at no other. Induce the class to read fully and recite on the organization of the two houses of the Legislature and the inaugural exercises at the State House. If the study is pursued at some other time of year, the papers should be carefully preserved. Discuss the governor's message and every day's proceedings of the Legislature. By the aid of the Legislative Manual make out a conspectus of the methods of introducing bills, of their various stages and passage through the Legislature, and follow in the dailies, if possible, several bills through their courses. Some teachers have a mock legislature, and pass bills in due form; this is valuable, certainly more so than we too often find it in the state capitols. Procure, through a senator or representative, a series of the daily calendars of the House and Senate for a week or two, and have them carefully read and understood.

Let one student present exactly the organization of the state militia, putting the outline on the board; another, the police-courts; others, the circuit, superior, probate courts, and so on. It is interesting and profitable to organize a court in due form and try a case before a jury: begin at the jury-box and end with the sentence or judgment. In fact, any real work is good practice; as arrest and justice trial, grand-jury presentation, case of administration or insolvency or naturalization. If possible, obtain blank forms such as are in actual use. In the same careful way we may go through the council, the various executive boards, etc., giving as much detail as may be. Great care, however, must be taken not to multiply details till they grow confusing or obscure the main features of the work. The three departments of the government, with their main branches and functions, are the chief things to be kept constantly before the mind, that one may in no way become confused with another.

As this work progresses, there is grand opportunity for collateral lessons of great value. First, of the proper reading of the daily paper, and, indeed, of the proper daily paper itself. Second, of living questions of state policy as they come up: biennial elec-

tions; appointment or election of judges and sheriffs; questions of temperance, taxation, and even of parties and candidates. I have never had the least trouble in the discussion of all such questions in a proper way. It is vastly better for the boys to learn how to talk politics here than in the corner grocery. Let them talk freely; let them learn gentlemanly restraint and courtesy, and the great difference there is in the opposite sides of the same fact. A set debate, occasionally, on some of these current questions is an excellent practice. A third matter, quite as important as the others, is the study of the history of institutions. Of course this cannot be very thorough or complete, but it can be begun and be made stimulating and educational in the highest degree. Let the teacher, for instance, give a history of the town from the early Germanic days; let a pupil work up the county; another, the sheriff; another, the jury system, habeas corpus, the history of the Massachusetts Constitution, the origin, in England or in Massachusetts, of the two legislative bodies, and so on. If there are not suitable reference books for this sort of study, they should be provided in some way; the librarians of our public libraries are usually only too glad to assist young people in such work. The most important graduation we can make is from the classroom into the library; from the mere learner into the investigator.

In all this I must not be understood as giving any full or exact outlines of the work in hand, only leading suggestions and indications of what seems to be the true course. The scheme must be narrowed or widened entirely in accordance with the time at our disposal and the age and maturity of the class. If it is objected that more has been indicated than can be done in a few days, I must say that it is astonishing what a live class will do in this live way, even in a short time.

3. The third branch of the subject is our national polity. For the proper study of the Constitution, only one book is absolutely necessary — the Constitution itself; but few teachers are equal to this, and others should be on the desk; as, Pomeroy's Constitutional Law, Lamphere's United States Government, a good statistical almanac, a copy of the latest tariff, and as many more as may be. A school textbook in the hands of the class is valuable; but, unfortunately, most of these contain so little that the larger books indicated are better.

We begin with a brief historical review of the various attempts

at consolidated government in this country, from the Mayflower compact, if you please, to Franklin's proposed union in 1754. The Continental Congress, with the rise of the Confederation under it; the Confederation, with the rise of the Constitution under it; the Constitutional Convention; the adoption by the States, — all need a brief but careful study. I like to give these several topics to various members of the class to be worked up into essays for the benefit of the whole. Remember that every phrase of the Constitution has a history, a meaning, a practical and political bearing often much beyond what the mere words convey. These it is our object, as far as we may, to ascertain. Why "We, the people of the United States"? It is the most fundamental thing in our government, which it took a civil war to settle, if, indeed, it be yet settled. So, at every stage, we strike points that have given rise to most divergent interpretation; implied powers, state rights and popular rights, strict construction and loose construction, the origin of our great parties and of our political strifes, — let these be everywhere carefully brought out. At each section and clause of the Constitution — What? Why? How did it grow up into convention? What was the compromise, if any? What, if anything, have the courts said about it?

Under the House comes its apportionment. How, in practice, is this made? not in a general way; but do the sum on the blackboard, as the congressmen did in the debate about the last one in 1882. Just how are representatives elected — the districting, caucus, convention, election, and the rest? What is the organization of the House? Obtain a Congressional Manual, if possible, and make a brief study of committees, rules, etc. Get pictures or plans of the two Houses and see where the officers and the members whom you know have their seats. Show how a bill gets through Congress. Read the papers and know who the leading congressmen are, the measures proposed or enacted, the debates, etc. Read and discuss the President's Message, the department reports, and the like.

I can only say that in the same thorough way I would go through the whole Constitution, getting as much as possible into the real, everyday working of the thing itself. How many can tell exactly how a President is elected? Follow out every step from the caucus and the conventions to the count of the vote by the Vice-President, and the inauguration. What is the present

law of the presidential succession? what the proposed law on the electoral count? In the departments go as much into detail as possible — their origin, different bureaus, officers, duties, salaries, etc. Under the money clauses bring out the history of our coinage; of our various bond issues, greenbacks, national banks. Explain legal tender and do not by any means forget our present magnificent silver dollar. Under the clause about excise, duties, etc., let internal revenue, tariffs, protection, free trade, be well understood and take the class right into the discussions in Congress and in the papers. In all cases how does this national court, taxation, election, etc., work in among, and compare with, the same things in the state organizations? All through this work there is admirable opportunity for an occasional debate on some current topic, and for essays and sketches on various subjects which need not be here indicated.

Remember I am not making a working plan; only indicating a few things by way of illustrating what seems to me to be the living way of teaching this subject. After finishing our Constitution it would be well, if possible, to give a brief outline of the leading European governments and of some of the practical questions of the day under them. Certainly we should know something of the English Constitution and the Irish question, and such knowledge will materially enlarge our views of our own institutions.

4. As the fourth and concluding part of this course, I like to spend a few days on some of the general principles of law. Our high schools, I know, cannot have law-schools attached, nor can our teachers master the intricacies of the law; but where, if not here, are the masses of our people to learn any correct notions on these important matters? Even a single lesson each, spent on such subjects as civil rights, contracts in general, marriage, principal and agent, partnership, notes and bills, interest, deeds and mortgages, landlord and tenant, will, I am convinced, be among the most valuable contributions to the future actual business of our pupils that we can possibly render.

Finally, at the conclusion of all this, as I said at the outset, I would return with all the added light of this rich study to a more careful examination of some of the foundation principles with which we set out — society, rights, law, government, and the rest. In these days of multiplied social reforms, vagaries,

and isms, — some of them good, many illogical and pernicious to the last degree, — our young men, and young women too, — for what a power behind the throne have they become! — cannot be too thoroughly grounded in the underlying principles of society and government.

I have used civil polity merely as a good illustration; in much the same way should the other branches of civics be taught — ethics, political economy, and the history of our government under the Constitution. This last is of special value as giving a practical application to all these principles that we have learned. How have they worked in the daily life of the nation? What have been the questions at issue all along the century? Who the leaders? What the parties, the principles, the successes, the mistakes? And do not let us make the mistake to which our present schoolbooks on constitutional history would seem to tempt us, of merely educating politicians; they are like the frogs of Egypt among us now. We need more than this. Presidents, congresses, political questions and parties are important; but what of our factory systems, our railroad systems, labor questions, inventions and their results, temperance and religious movements, our currency, commerce, manufactures, agriculture, education, literature, the growth and structure of our population, and other similar important subjects? It seems to me these ought to come in at this high school stage of our preparation for citizenship, and that we should teach the history of American progress, of the American people, rather than the mere narrative history now in vogue, or the mere political history that is coming in.

They are slowly taking away the Bible and religion from our schools; yet I am not sure but they are about to give us more than they take. These things, as we ought to teach them, are practical Bible at every stage — political duty, social morals, the brotherhood of man, the religion of the Golden Rule. Nothing but the thorough indoctrinating of our youth, heart and soul, in right principles on these vital things can save us from the dark and destructive socialistic tendencies of the times. I rejoice that these studies are so rapidly forcing themselves in upon our schools; for, with half our population never inside a church, I do not anywhere see, except in our public school system, a force of sufficient strength available to accomplish this great work. Unless all indications fail, this new subject of civics is about to

inaugurate one of the most important educational advances that we have for some time seen. As a citizen, patriot, Christian, I rejoice that it is given to you and me to bear so important a part in this great movement. May it be carried on with such zeal and wisdom that God and truth and Fatherland shall more than ever bear sway over this American people!

A DIARY'S SECRET.

BY ELIZABETH PORTER GOULD.

JANUARY 1, 1867.

GOD'S love was once enough
My heart to satisfy,
When in the days of childhood's faith
I knew not doubt or sigh.

But since I saw Ray's face
And knew his love's sweet cheer,
And felt the anguish and despair
Which come from partings here,

So hungry have I grown,
No love can satisfy,
And all my childhood's faith in God
Doth mock me as a lie.

But still in these dark hours
I hold one anchor fast:
"Perhaps this is the *woman's* way
To reach God's love at last."

JANUARY 1, 1887.

The deepening years have proved
Love's conquest justified;
The woman's hungry heart at last
In God is satisfied.

CHILD-KNOWLEDGE, FORMULATED AND UNFORMULATED: HOW TO USE IT.

BY B. F. TWEED, FORMERLY SUPERVISOR OF SCHOOLS, BOSTON.

WE have lately had a paper by one of our oldest and ablest superintendents on "The Presumption of Brains." This paper is, in many respects, timely. No doubt there is, at the present time, a tendency to underestimate the knowledge of pupils, when, at the age of five or six, they enter the primary school. It is a natural reaction and protest against the old method of presuming pupils to be able to understand abstract definitions, couched in terms of which pupils were entirely ignorant. It is in perfect accord with the change of methods in our high schools and colleges in teaching physics and chemistry, the inductive instead of the deductive. The fault in our primary and grammar schools seems to be that we presume the pupils to be ignorant of everything they cannot formulate.

What, then, does the child know when he enters the primary schools, and how has he acquired that knowledge? Or, rather, what faculties have been brought into play, to what extent and how has their activity been excited? As soon as a child has been brought into relations with the external world through the senses, his mental activity begins. Our works on psychology treat of the development of the faculties in a certain order. This, however, is rather a logical statement, or a scientific analysis, of what can never be *observed* — even if it exist — than a chronological genesis of the several faculties. These can be observed only in a living synthesis. The fact is, as soon as clear presentations, or cognitions, have been admitted into the mind, the whole mental machinery is put in motion. Notions are compared and classified as concepts; from concepts, judgments are formed, and, at least, immediate inferences are drawn. Of course all this mental activity turns out very crude and imperfect but not wholly erroneous results. The first idea of the meaning of a term as applied to an object is that obtained by a single presentation. If it is the name of an object, it is a proper name; and it is only after hearing the word used many ways and after an

infinite deal of experience that the accidental properties are eliminated from the constant, and a distinct and adequate concept is formed. But there is abundant proof that all these mental operations are performed before the child has a sufficient use of language to enable us to make any very accurate observations on his mental development. When, however, the child not only understands, to some extent, what is said to him, but begins to use language to express thought, the opportunities for observation are greatly increased.

Now, as the mind does not receive impressions passively, but reflects upon them and compares them with notions already stored up, language is at first analytical. It does not give a mere picture of the object, but shows, also, the working of the mind upon the notions or pictures it has received, with the order in which it regards them. The simplest utterance of language illustrates this ; thus, "The bird is flying" is an account of an object which the child sees in this condition. But though the object was single, the thought calls up two notions, that expressed by "bird," and that expressed by "flying," — this difference being the result of an analysis, separating, in thought, the bird from its present action of flying, and then bringing them together. If the view that I have taken is correct, that all the faculties are brought into activity as soon as the appropriate objects are presented, it would seem to follow that the knowledge which the child has acquired is that for which he has obtained the raw material from sense perception, and the products, more or less, which have been the result of his mental action upon them. The order, then, in which the faculties began to work is not a matter of *observation*, to any great extent, but a philosophical explanation of the logical order in which it is assumed they *must* have been developed.

Even science, as Martineau says, is not a literal statement of the methods of creation, but a system of equivalents, an alphabet, by which we slowly and imperfectly spell out the instantaneous thought of God.

Before, however, the child enters the primary school, he has learned so much of language, as I have already said, that we can observe, much more intimately, his mental processes and the gradual development of his intellectual powers. And this period, from two or three to five, seems to me to be, in many respects, the most interesting period for observation.

Having no sense by which we can see directly the working of the mind, it is chiefly in watching the development of language that we trace the mental operations of which language is the expression. We know with what rapidity children acquire command of the names of objects with which they are familiar, how soon they are able to use some of the most common verbs, to indicate the quality of objects by adjectives; in short, at the age of three or four they are able to make statements with most of the qualifications made at a later period.

Now all, or nearly all, of this has been learned without conscious effort on their part, or *conscious tuition*. The interest awakened by the novelties which strike the senses is such that no stimulus is required to keep the mind on the alert. Nor is it a mass of undigested knowledge that the child acquires. There is abundant evidence that the will is at work to systematize and arrange it. By knowledge, I do not mean that he can make an abstract statement of it, but that he has knowledge that he can *use*, though he has never formulated it; and which he would not understand, if enunciated in a distinct proposition.

It is true that every *process* must be in accordance with certain laws. But it does not follow that there is a conscious recognition of those laws because the process is performed. On the contrary, we are able to *discover* these laws, and make a formal statement of them, only by analyzing their results.

This is only saying that *art* must, chronologically, procure science; and that science is not an historical statement of the successive steps by which a process *is* performed, but rather an attempt to resolve into elements the apparently instantaneous operations of the human mind. Now the mental activity of the child is subject to these unconsciously recognized laws, as is plainly manifest in their use of language; and I repeat, that nearly every regular inflection in the language, and all ordinary constructions, are recognized and *used* by the pupil before he enters the primary school.

I say, then, that the great error in our teaching is that we *ignore* this vast storehouse of unformulated knowledge, and pour in words of learned length (which convey no ideas to the pupil), and flatter ourselves that when we tap him the utterance of these sounds is evidence of knowledge.

Thus, in teaching the simple processes of arithmetic, we talk of

the subtrahend and minuend, the quotient and multiplicand, the common denominator, the greatest common multiple.

Now all these words are Greek to the child. His attention is taken entirely from what the teacher is trying to make him understand. *He* is trying to learn a *language lesson*, while *she* is intent on teaching *arithmetic*. The result is that the teacher says or thinks, "stupid!" Yes, there is stupidity. But *who* is stupid? Echo reflects the answer back to the teacher; and you *can't whip* an echo for *impudence*. I believe that education, especially in the primary and grammar school, is best promoted by adding to this store of concrete knowledge, by the study of things, and gradually *formulating*, in language intelligible to pupils, which then they already recognize in *use*.

First, then, I will speak of the methods by which the pupil has obtained his present knowledge and by which his faculties have thus far been developed. It has *not* been by the use of what is regarded as direct instruction. His knowledge of things has been obtained by *seeing*, *handling*, *tasting*, *hearing* — in other words, by sense perception; and language has now become a necessity to him in communicating with others and in preserving and recording his own thoughts. It should be borne in mind, however, that he needs at this period but a small vocabulary, as that is sufficient to give expression to his thoughts. I am not certain but we might be saved the trouble of listening to a great many long speeches if the vocabulary of our public men were limited to their knowledge of the subjects they discuss. We speak of the necessity of increasing the pupil's vocabulary. But this, I think, is putting "the cart before the horse."

What we want is, to increase his knowledge; and an increased vocabulary will follow, "as the night the day." I recollect that when President Sears edited an edition of Roget's Thesaurus, Mr. E. P. Whipple took exception to it, on the ground that a man had no use for, or *right* to, *words* until they become necessary to give expression to his *thoughts*, and that then our dictionaries are enough.

In this view of the case I am strengthened by the fact that those who have made education a study — though regarding it from a different standpoint, that of psychology — arrive at the same general results.

We have seen that the child of five has obtained whatever he

is possessed of by sense perception and the natural working of his mind upon the facts thus derived. This knowledge has been undoubtedly increased by indulgence in that youthful propensity to ask questions.

Here, then, is the legitimate work of the teacher, to bring the child's mind into relation with the subjects or objects which he is to study, and to answer, or to aid the pupil to answer, such questions as are suggested by such presentations. But how are we to bring the mind of the pupil into such relation with the subjects taught in our schools — reading, grammar, writing, arithmetic? Well, what is reading? Is it merely calling words without any idea of their meaning? That would seem to be its signification if we were to judge by the textbooks used in many of the classes and by exercises frequently heard. If, however, reading is a means of getting from the printed page the *thoughts* of the author, and reading *aloud*, the means of *conveying* those thoughts to others, it would seem to indicate that it should be taught "in subservience to the knowledge of *things*." Here, then, we may — if we have the wit to do it — make the knowledge already acquired available. It is simply representing to the eye what is already familiar to his ear, as a *sign* of ideas of knowledge. And here, also, *writing* comes in; not as a mere "pothook and trammel" affair, or as an analysis of he knows not what into *elements*, but as a means of giving *expression* to what he *knows*. It might have been said, a few years ago, that this was a beautiful theory but wholly impracticable. It will not be said now — for even "the elements" of penmanship have been "melted" in the "fervent heat" of some of our best teachers.

Nor is this applicable only to the primary school and the processes of learning to read and write. In teaching language the principle should be the same. "The study of vernacular authors," says Hudson, "should be prosecuted in entire subservience to the knowledge of *things;* if turned into a word-mongering process it touches no free and natural springs of interest, and so becomes tedious and dull — just the thing to defeat all that pleasure which is the pulse of mental life. For the proper business as also the healthy instinct of young minds is to *accumulate* and *lay in* stores of matter." The analytic and discriminative processes are silently working and preparing at a later period to bear fruit, but to anticipate the proper time for them is a very bad

mistake. Hence I say that the proper time to answer questions is when by the presentation of subjects of thought the curiosity of the child is stimulated and he knows enough to *ask* questions. Our methods of teaching are too often the reverse of this, unnatural; the teacher, the one who *knows*, asking the questions, while the pupils, who don't know, are expected to answer.

Under these circumstances it is but fair that the teacher should accept a form of words, meaningless to the pupil, for an answer. And thus we have a kind of "fiat currency," representing no thought, but passing in many of our schools as a legal tender. Is it strange that with such a currency as the standard of value, there should be such an inflation as to produce panics in our educational systems analogous to those we witness in financial affairs?

The only excuse that teachers can urge, and it is an excuse for them, is, as Hudson says, "that the knowledge of *things* proceeds too slowly and too silently for the ends of schoolroom show and for the *examinations* to which the pupils are often subjected. Boys in school shine chiefly by the knowledge of words, for this is the mere work of memory; but in practical life men are useful and successful in proportion to their knowledge of *things*." How many of the pupils in our schools that can give us the table of long measure without hesitation, have any definite idea of a rod, except as a measure of departure from the right, or can measure with any accuracy the dimensions of the schoolroom?

Nor is this a mere failure to teach well; it is positively bad teaching. It is in the school, and it goes through life. Books are abused. Reading, for the most part, is intellectual dissipation. Goethe said: "I have been fifty years trying to learn to read, and I have not learned yet." He did not feel that the reading was of any account unless he had obtained such a knowledge of the events recorded as would have been obtained by actually witnessing them. So also with regard to arithmetic. We too often teach figures entirely distinct from any idea of number. And how much of this "fiat currency" passes between teacher and pupil in the history and geography lessons!

But I may be asked if better teaching is going to remedy all the faults of which I complain. In other words, are teachers alone responsible for this mere word-mongering?

No. They are too often required to teach the program in accordance with a certain textbook, without regard to the fitness of the pupils for such studies and with an examination staring them in the face and threatening their bread and butter.

The character of this examination will in a great measure, even with intelligent and conscientious teachers, determine the quality of their instruction. If it is merely a question in percentage, there is no difficulty in grading the pupils and at the same time *degrading* the teachers, literally killing two birds with one stone. But here neither denominate numbers nor the metric system furnish a yardstick or meter that will measure intellectual and moral growth with such accuracy as to be recorded in any system of percentage.

There is no better illustration of teaching than that drawn from the culture of the soil: First, the preparation of the soil; second, a due reference to the time of sowing the various kinds of seed; third, removing weeds and whatever takes from the nourishment of the plant. So much the farmer can do, but God only gives the increase.

So with the teacher. Some seed will fall by the wayside, and the fowls of the air will come and devour it up. Some will fall on stony ground, and because it has no depth of earth it will immediately spring up; but because it has no root, it withers away. This is a type of the precocious pupil who blossoms at an exhibition or school examination; but when removed from the greenhouse and set in the soil of actual life, he withers away "and straight is seen no more."

Some seed is choked by thorns which the teacher cannot remove; but some, and we have reason to hope much, seed sown and tended by the teacher with a constant reference to the requirements of nature, will bring forth fruit, some thirty, some sixty, and some a hundred fold.

But with the teacher, as with the husbandman, it is given only to sow the seed in prepared soil, at its proper season, and to keep it free from weeds, exposed to the genial influence of sunshine and shower. Where these conditions are intelligently and faithfully attended to we may safely trust to the natural laws implanted in the human mind for the increase.

A FEW WORDS ABOUT THE BOOKS.

BY FRANCIS NEWTON THORPE, PH.D.,

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EMERSON once contented himself with the satisfaction of having within the four walls of his own library at home the best of the great library at Harvard. A tolerably complete library in American history must contain the following: —

DOCUMENTARY — PUBLIC.

The journals of Congress, 1775–1887.
Official reports and debates of Congress.
The Congressional Globe.
The Congressional Record.
The "Executive Documents" of both Houses.
American state papers.
The Presidents' messages.
Treaties and conventions.
Census publications.
The statutes at large.
Charters and Constitutions of the States.
Supreme Court reports.
Official papers from all departments, both federal and state.

CONTEMPORARY.

Private manuscripts.
Letters and papers.
Pamphlets.
Newspapers, periodicals.
Maps, diaries.
Biographies.
Travels, almanacs, fiction.
Formal histories — general and local.
Special histories — political, social, military, industrial.
Writings of public men.
Cyclopædias, formal treatises.
Geographical and topographical works.

FORMAL.

Histories.
Bibliographies.
Criticisms.
Reviews.

The size of such a library might easily reach fifty thousand volumes, and the cost a hundred thousand dollars. There is not in this country in one place such a collection. That the above estimates are not wholly in error may be judged from the special collections in Americana on certain subjects, as on slavery, at Cornell — a large and costly shelf of a complete library on the whole subject of American history.

It is not for those who have access to well-equipped public or private libraries that we write, but rather for those who are compelled to limit themselves to the purchase of a few books. Of the more than one hundred thousand publications on American historical themes, general and special, only a very few can be owned by the teacher or the general reader. In truth, only a few of them need be owned — the few that bear to the one hundred thousand the same relation that Emerson's home books bore to the rich Harvard library. There is a curious tradition or information concerning the stock histories of the country. A common question among high school pupils is: "Is Macaulay's History of England the best one to get?" implying, Is that celebrated history the best entire history of England? It is a work more talked about than read, although commonly found in every library. The reader is sometimes surprised to discover that the brilliant Whig tells him only twenty years of English history.

The similar question concerning American history is about Bancroft, and the reader who closes the last volume finds that he has not reached the United States. Hildreth, a learned historian now seldom mentioned by press or people, suddenly cuts off the story early in the first half of the century, and the reader wearies of invective. Von Holst's Constitutional History is a learned German essay on American institutions; is written from the view of a believer in a philosophy of history, and is an attempt to harmonize American history with the claims of that philosophy. McMaster, in two volumes of a promised five, reaches the purchase of Louisiana and tells in readable English the story of the daily life, the thoughts, the fancies, the labor, and the foolishness

of the people of the United States. It denies (without so asserting) the claims of those who believe in the so-called "philosophy of history," which Dr. Adams, of Johns Hopkins, defines as "only one man's opinion of history; for example, Hegel or Schlegel or some other dreamer." Schouler in three volumes labors to be interesting, and is written for the man who prefers facts coldly stated to an English that men talk. Bryant and Gay (mostly Gay) produced three heavy volumes that sold on the strength of the great poet's name, and proved a fair subscription book on account of the pictures, that are not always carefully labeled, nor well imagined. Lossing wrote, as it were, an anecdotal history of America, and a group of artists have illustrated the anecdotes; but his history is never quoted as an authority. His "Field-book" is, however, an American classic.

This brief list exhausts our number of greater historians; that is, those who have written general histories. No one of them has written a history of the country covering its entire period.

Within the last twenty years the theme of the historian, like the interest of the typical American citizen, has become industrial. We live in the century of great industries and our lives are dominated by them. No book ages faster than a history, and no history, as that one conceived and put forth by a doctrinaire. What has become of the famed "Introduction" by Buckle? What has become of every history written by a man who had a theory to expound? We have the early Greek and at least three of the Roman historians with us yet, but they were all plain story-tellers who merely told what they saw or heard, and did not construe daily events into illustrations of a recondite philosophy. Greeley's American Conflict illustrates the truth of this statement. His first volume holds its own as an earnest presentation of certain truths concerning slavery, but the second volume soon ceased to be read because, in a political sense, it was doctrinaire, or, using a more expressive word, partisan. A common remark about Greeley's history is that it was written before the war. Von Holst will not long maintain its present place among American histories. It is not history: it is learned opinions defended by sharp analysis of some events in our history. It is the best instance, among current histories of the doctrinaire tendencies, of a modern German school, and further illustrates the value of German methods when

applied to the investigation of American affairs. The learned author has failed to reach the American people; he will be read by specialists.

Bolles's Financial History of the United States is the first work of its kind. It has at once taken its place as the only treatise on the theme of meandering policies pursued by Congress and secretaries from the organization of the government to the present time. The author, well known in financial circles, simply tells the strange story of American money matters without attempting to construct a theory of finance. Those who have known the historian sometimes fail to find in the history that charm, characteristic of the man in conversation, and regret that some small portion of the reminiscences and anecdotes pertaining to the men in whose hands our financial affairs have been intrusted since the war, have not at least been saved in a foot-note. But a merry story about Secretary Chase might mar financial history of the origin of the greenback.

Donaldson's Public Domain is a history of the land, published by the Forty-seventh Congress, as Miscellaneous Document, 45. No other publication covers the same ground. This is a brief account of the origin, cost, survey, sale, settlement, and character of the public domain, with maps, diagrams, statistics, tables, and historical notes.

The American Statesmen Series now numbers fourteen volumes; each a book of about four hundred pages, in the nature of a brief biography of some leading statesman. The last addition to the series is typical of them all, Theodore Roosevelt's life of Thomas H. Benton, an essay on the life and times of that distinguished Missourian. These books do not rise to the plane of histories, nor, in each case, to that of biographies. Von Holst's Calhoun is like his Constitutional History, and Sumner's Jackson, the most learned book in the series, is not unlike other books by that learned free trader. These books cannot be cited as authorities; they are pleasant reading and suffice for those who have no opportunity to consult exhaustive biographies.

Davis's Rise and Fall of the Confederate Government is worthless as history; but the early part of the first volume contains a statement and a defence of anti-national views.

Wilson's Slave Power is an earnest history, by a pure and high-minded American statesman, of slavery as a factor in Ameri-

can politics; but its value has been diminished somewhat by a broader treatise, Williams's Negro Race.

Preston's Documents is a recent invaluable compilation of papers illustrating our history, and contains copies of documents not easily accessible. The American Commonwealths Series is similar to the Statesmen Series, although as yet not so valuable or interesting. With one exception, the series seems to be written by men who have missed their opportunity.

Bishop's History of American Manufactures is the chief work on that subject, and, read in connection with some treatises in political economy, such as Walker's, Thompson's, etc., is invaluable.

Scribner's Statistical Atlas will continue to be the best authority until the publications of the next census supplant it. Hadley's Railroad Transportation is the present authority on that subject. The Johns Hopkins "Studies in History and Politics," the monographs already published by the American Economic Association, and "The Questions of the Day" are short, yet valuable, treatises on themes of living interest. Such works as Webster's, Calhoun's, Hamilton's, are invaluable, as will go without saying. Two small textbooks possess decided merits: Scudder's and Johnston's Histories of the United States.

The most useful publication in American history is Lalor's Cyclopædia, a work in three octavo volumes, written by learned specialists. The smallest working library that could be formed in our history would doubtless contain Johnston's History of the United States and Lalor's Cyclopædia. At best, no other four books contain so much on the whole subject. To these four should be added an atlas, and to the atlas a person of sound mind. In some future paper we may venture to tell in few words what may be accomplished by this person and a class of girls and boys.

ALL that a man does outwardly is but the expression and completion of his inward thought. To work effectually he must think clearly; to act nobly he must think nobly. Intellectual force is a principal element of the soul's life, and should be proposed by every man as the principal end of his being.

DR. CHANNING.

NEW INTERPRETATIONS OF THE FOLIO TEXTS IN MACBETH.

BY HOMER B. SPRAGUE, PH.D., OF SAN FRANCISCO, CAL.

IN the following quotation it is the last line that puzzles:—

> *Ross.* The king hath happily received, Macbeth,
> The news of thy success; and when he reads
> Thy personal venture in the rebels' fight,
> His wonders and his praises do contend,
> Which should be thine, or his. — *Macbeth*, I, iii, 89–93.

Macbeth's title to the throne at the outset was better than Duncan's. To that claim he had now added another: by his heroism he had just saved the kingdom. Duncan recognizes this extraordinary desert and in the first glow of generous enthusiasm feels that the highest possible reward, not alone the forfeited thanedom of Cawdor, but even the whole of Scotland, belongs as much to Macbeth as to himself. He feels like giving him the half, or even the whole, of his kingdom. He says this, though perhaps in vague terms; that he will pay him "a greater honor," of which the thaneship is but "an earnest." To make him thane of Cawdor, and nothing more, would be gross ingratitude. (See I, iv, 5.) Ross and Angus gather the meaning, and being sent by the king to convey his sentiments, they tell Macbeth that the king's wonder contends with his ability to praise and that the question in the king's mind is, "What shall belong to Macbeth, and what, if anything, shall be withheld as belonging to the king?" not exactly, in colloquial phrase, "which *is* which," but which thing in all Scotland *ought* to be Macbeth's and which *ought* to be the king's.

> His wonders and his praises do contend
> [as to] Which [thing, be it riches, honor, power, the throne itself]
> should be thine, or his.

Hudson, who gets a glimpse of the true meaning, changes "which" to "what," remarking, "Commentators have tugged mighty hard to wring a coherent and intelligible meaning out of the old reading, and I have tugged mighty hard to understand

their explanations; but all the tugging has been in vain." But there is no need of any change in the old text.

> One of my fellows had the speed of him. — *Macbeth*, I, v, 33.

The Clarendon Press editors say in explanation that the line means: "One of my fellow-servants outstripped his master. The phrase 'had the speed of him' is remarkable."

Such, I believe, has been the universal explanation; but I am convinced that the word "speed" here means simply the *parting salutation* to a swift messenger, "God *speed* you!" or perhaps the bare word "*speed*." This is consistent with usage and entirely congruous with the context: —

> Our thane is coming.
> One of my fellows had the *speed* of him;
> Who, almost dead for breath, had scarcely more
> Than would make up his *message*.

In the following passage the word "sides" is the stumbling-block: —

> Wither'd Murder
> Alarum'd by his sentinel, the wolf,
> Whose howl's his watch, thus with his stealthy pace,
> With Tarquin's ravishing sides, towards his design
> Moves like a ghost. — *Macbeth*, II, i, 52–56.

Mr. Fleay puts a comma after "ravishing" and makes "sides" mean "sidles" (or moves stealthily). But such crablike movement is not appropriate for either Macbeth or Tarquin; the idea of stealthy movement has already been sufficiently expressed, and this interpretation leaves an awkward break in the syntax. Of the many proposed emendations, the best is Pope's, changing "sides" to "strides." But this is objectionable because it assigns a very unusual meaning to "strides" and because it makes too much of the *kind of motion* which, without the word "strides," is described as stealthy and ghostlike.

Side is used by Shakespeare for *party*, as in *Coriolanus*, IV, vi, 153. Milton speaks of "a strong-siding champion Conscience," *Comus*, 212. My "side" is my party in a contest. The plural, "sides," for the singular — like "wisdoms," "loves" (*Hamlet*, I, ii, 15; *Macbeth*, III, i, 121) — survives in the expression "take sides." Tarquin's "sides" are those who *side* with Tarquin — his auxiliaries. What are they? Evidently such as

are described by the poisoner Lucianus, in *Hamlet*, III, ii, 233, 234 (we change one word): —

> Thoughts black, hands apt, [arms] fit, and time agreeing,
> Confederate season;

to which we might add the spirits that "wait on nature's mischief." All these evil agencies that accompany Tarquin and share his accursed crime, Macbeth imagines himself moving with a gang of devils to the murder of Duncan: —

> . . . thus with his stealthy pace,
> [in company] With Tarquin's ravishing sides [allies], toward his design,
> Moves like a ghost.

THE ANGLERS.

BY G. T. JOHNSON.

THEY sat together by the brook,
The bashful swain, the coy maid;
Together each threw in a hook
Beneath the sycamore's sweet shade,
Then silent sat, with bated breath
(Just glancing at each other's eyes),
The while they watched the speckled trout
Come dancing round the tempting flies.

Through all the dreamy afternoon
They silent watched the drifting flies,
The clouds that flecked the sky of June,
The sunlight of each other's eyes.
When the dim shades of eve came on
And all their fish were homeward brought,
A sweet surprise throbbed through each heart,
That had, besides the fish, *been caught.*

EDITORIAL.

GENERAL FRANCIS A. WALKER, a vigorous, working member of the Boston school-board, addressed that body recently in favor of a change in the method of teaching arithmetic in the schools of that city. He held that the time now devoted to this branch of study — four and a half hours a week — was greater than is needed, and recommended that this be reduced to three and a half hours.

General Walker "disavowed all purpose of disparaging the importance of the proper study of arithmetic, but there has grown up a false arithmetic which has largely crowded out that true arithmetic *which is nothing but the art of numbers.*" (The italics are ours.)

He quoted Sir William Hamilton as denying "that mathematics educates to any active exercise of the power of observation, or cultivates the power of generalization, or is useful as a practice of reasoning. The single benefit to which the study of mathematics can justly pretend is the strengthening the habit of continuous attention."

General Walker "reaches the conclusion that not only the imperative demands upon the time of our pupils, but the character of the subjects of study, new to this age, justify and require that the study of arithmetic be restricted to that amount which is needed to give facility and accuracy in ordinary arithmetical operations, with a view to the use to which this power is to be put, either in practical life or in the subsequent and higher studies."

The following quotation will indicate the changes that are proposed: "Compound interest, compound proportion, compound partnership, cube root and its applications, equation of payments, exchange, 'similar surfaces,' and the mensuration of the trapezoid and trapezium, of the prism, pyramid, cone, and sphere, are proposed to be dropped from the course in the grammar school. If these subjects are to be studied, it should be in the high school. In pursuit of the same object it is further provided in the report of the committee that all exercises in fractions,

commission, discount, and proportion shall be confined to small sums and to simple subjects and processes, the main purpose throughout being to secure accuracy and a reasonable degree of facility in plain, ordinary ciphering."

THE school system is improved from time to time by healthy discussion. That city is to be congratulated which has upon its school-board such thoughtful, active men, practically engaged in educational work, as General Walker, a man with a national reputation. Any utterance of his, especially a carefully prepared address like this, read before the learned and able school-board of the city of Boston, should receive, and will receive, wide attention and careful consideration. Moreover, the positions taken by General Walker are those which he has long held and carefully elaborated. With much that he says there will be general agreement, and wherever any shall venture to question the correctness of his views full deference will undoubtedly be paid to his ability and his great interest in the work. The city of Boston is largely his debtor in that he is willing to give the time necessary to be a hard worker as a member of her school-board. The Old Bay State may also congratulate herself in having upon her board of education such men as General Walker, Dr. A. A. Miner, and A. P. Stone.

IT may not be entirely out of place, however, to consider for a moment some phases of this question of arithmetic, and of mathematics in general, as it relates to Boston, New England, and the country.

It goes without saying, that the changes and the progress made within the last ten, twenty, fifty years, especially in the development of scientific thought and its application to the business of life, have necessitated a large readjustment of school studies. Those parts of the country where the advance of science has been most marked have, of course, found the necessity for greater changes than elsewhere. It has long since come to pass that mathematics is frequently not so fully nor thoroughly taught in New England as in many other parts of the country.

There are to-day, and have been for a score of years, colleges

where the education given is, on the whole, greatly inferior to that obtained in the colleges of New England, but where mathematics has been pursued farther and with more thoroughness and zest than in the older colleges.

It is also well known to many college professors that students from New England, on examination for admission to college, are oftentimes not so well prepared in the mathematical studies as those from certain preparatory schools outside of New England. Many academies and high schools in the great interior, in Pennsylvania, and elsewhere, can be named, where the students get a fuller mathematical training to-day in preparation for college than is given in the renowned high schools and academies of Massachusetts.

Still further, confining our attention to arithmetic, we find that the fullest and most complete textbooks upon that subject are not the books made in New England, or largely used there. The tendency, especially in New England, for thirty years past among arithmetic makers, has been to abridge and weaken and emasculate, until the textbooks on this subject now most extensively used in Boston and New England generally are among the briefest treatises upon this branch of study to be found in the schools of any civilized nation. Textbooks in England, Germany, and even France are often fuller, more difficult, and more abstruse than ours. In Pennsylvania, among the best schools, a broader knowledge of arithmetic can be obtained than is commonly furnished in the public schools of New England. Dr. Brooks's series of arithmetics, generally used in the great normal schools of Pennsylvania, which send out annually thousands of teachers into the schools of that State, are fuller, larger, and more difficult than the books in similar use here, made in New England.

It may be well to study carefully these facts and to consider whether there is any danger that Boston and New England should go too far in this direction.

IT is the popular thing in these days of the New Education, which has no novel element in it, to criticize the schools and the teachers. Any new thing proposed, especially a criticism upon the existing state of affairs, by some respectable authority, will not fail to find plenty of adherents and supporters.

What is needed, however, is to conserve what is good and to seek constantly for real improvements. It is equally incumbent upon us not to try doubtful experiments, and not to discard what is now in successful practice, unless we can prove conclusively that what is proposed will be in reality better.

It will be noticed that General Walker allies himself with Sir William Hamilton and those who with him doubt the utility of the study of mathematics. It is worthy of notice, just here, that even that great philosopher — who had not mathematical ability enough to understand what is meant by an "inverse ratio," and whose arguments against mathematics have been completely overthrown again and again, notably by John Stuart Mill — did not inveigh against the study of arithmetic: he only contended that the intellectual value of the higher mathematics had been overestimated.

WE come now to the most important point of General Walker's address, and desire to put on record a most emphatic protest against the view of arithmetic there put forth. The first quotation made above from General Walker's own words says that "*true arithmetic is nothing but the art of numbers.*"

General Walker declared that "the existing course of study is largely made up of exercises which are not exercises in arithmetic at all, or principally, but are exercises in logic; and secondly, that as exercises in logic, these are either useless or mischievous. The class of exercises that are here in mind will be easily apprehended. They are those where an example, or so-called practical problem, is given in figures and words which are to be reduced to the form of figures and algebraic signs; and thereupon the performance of the indicated numerical operations will yield the required result."

What can be more preposterous than such statements? The objection is made to "the existing course of study" as "largely made up of exercises or examples," "so-called practical problems," which are "*given in figures and words*, which are to be reduced to the form of *figures and algebraic signs;* and thereupon the performance of the *indicated numerical operations will yield the required result.*"

Still further General Walker says: —

"It may be unhesitatingly asserted that wherever the 'statement' which is preliminary to the performance of purely arithmetical operations involves a great deal of trouble, time, and thought, while the mere ciphering which follows is done easily in a minute, as a matter of course, such exercises are not exercises in arithmetic but in logic. To smuggle exercises of this character into instruction given in the name of arithmetic is an abuse."

Obviously, then, we must have no concrete, practical problems, but only examples in pure number.

Objection would then be legitimately made against asking pupils to find how many yards of carpeting, one yard wide, would be required to carpet a room fifteen feet square. Indeed, these same objectors have already thrown out from questions for examination for promotion the following: —

"What is the difference in feet in the width of two doors, one of which is thirty-six inches and the other sixty inches wide?"

This is certainly a question in arithmetic. It may involve something more than "the *art* of numbers." There surely *is* such a thing as the science of arithmetic. It may be that the study of this science includes something of logic, but is it therefore "an abuse"? If the teaching of logic in arithmetic is "an abuse," then by parity of reasoning the teaching of logic in English Grammar and in Latin is an abuse, and the study of analysis and the thought in sentences must be abandoned. Everything beyond the "art" is "an abuse."

GENERAL WALKER is the honored president of The Massachusetts Institute of Technology. That institution is supposed to give a technical education, — if such a term be not a misnomer, — to prepare young men to be competent bridge-builders, engineers, etc.

The distinction should never be lost sight of that the "common school" and, indeed, all higher *general* education has behind it the design to prepare not bridge-builders, or bookkeepers, or farmers, or mechanics, but voters, citizens, *men*. The object is intelligence, culture, power.

And has it come to this, that in Boston it is seriously proposed in the school-board to rob the children of the "science of arith-

metic," and leave to them only "the art of numbers"? Arithmetic is about the only branch of study, now that the old-fashioned "parsing" and "analysis" have become obsolete, by which the logical power of the children receives any practice or training. Of course, the amount of reasoning must be carefully adapted to the age and mental development of the pupils, but this is now very generally done, and done skilfully and successfully in most of the town and city schools of New England. Must all education be reduced to "the arts"? Is there to be left in the schools nothing for discipline, no "intellectual gymnastics"? Must the schools be sustained merely to teach the "art of numbers," the "art of bread-making," and the "art of whittling and sawing"? God forbid. General Walker himself would not, surely, sanction such an order of things. What, then, would become of "Boston culture"?

IN *The Forum* for April, Dr. Thomas Davidson has a clean and well-written article upon "Manual Training in the Public Schools." Dr. Davidson champions manual training in his well-known vigorous manner. He even goes so far as to say: "I am thoroughly convinced that our public education would, in every way, be a gainer if our high schools and colleges were turned into manual training-schools after the model of those in Chicago and St. Louis." He claims that French, German, Latin, astronomy, mental and moral philosophy, and the study of the United States Constitution "cannot be counted as necessaries in education," yet by some sort of reasoning that is not quite evident he insists that English literature *is* included among the "necessaries."

Much of the reasoning of the advocates of industrial training in the public schools seems to be false for two causes: First, that these writers often appear not to have the slightest notion of what education means; and second, because they utterly fail to observe that necessarily only a part of the education of youth is received or can be received in the public school. In the article before us is a specimen of this sort of reasoning. Dr. Davidson says:—

"In any case, seeing that a very large portion of our citizens must earn their livelihood by manufacturing, and that success in

this requires manual training, *such training* MUST *be included in our systems of education.*" (The italics are ours).

If this reasoning be true, then it follows: "Seeing that a portion of our citizens must earn their livelihood by" logging upon the Kennebec River, "and that success in this requires manual training, *such* training must be included in our systems of education," and as the mountain will not come to Mahomet, the schools must be moved to the Kennebec.

But the fog clears up the moment one remembers that manufacturing and logging and "earning a livelihood" are not the objects of an education. Education should not always be considered as a *means*, but it should sometimes be borne in mind that it is properly an end in itself.

Trades are learned by practising them — not in the public schools but in actual life. An intelligent manhood is the object of school work, and not to fit a boy to become a lively adjunct to a machine in order to earn a livelihood.

Many ordinary reasoners will probably find it difficult to tell why English literature should be classed in the category of the "necessities" of education, and Latin and the United States Constitution excluded.

Dr. Davidson says: "I have been in Italian schools, where each boy had his own garden plot to cultivate and tend, and in almost every case I found the boys interested in, and benefited by, their work." Undoubtedly; but pray tell us how this particular bit of manual training can be imported from Italy and made to flourish throughout New York City?

Perhaps this article may appropriately be ended by a further quotation from Dr. Davidson, but it is to be said that a slightly different meaning may be put upon the words than was intended by the learned author: —

"It is a strange American peculiarity that we are willing to invest means in anything rather than in men. The result is that we have big railroads, big bridges, big steamers, big fires, big accidents, big frauds, big 'boodlers,' and little men. We have everything but the main thing."

Possibly the proper thing to be done then would be to pay more attention to that education which is calculated to develop manhood and make *men*.

IT was a sight never to be forgotten by the large and distinguished audience assembled in the Boston Museum on the afternoon of Thursday, March 31, 1887, when the uprolling curtain revealed the nine famous authors gathered together to read selections from their own works for the benefit of the memorial fund of their loved friend and fellow-laborer, Henry Wadsworth Longfellow.

Eager eyes and warm hearts were greeting them when the presiding officer of the occasion, Prof. Charles Eliot Norton, after referring in a few choice words to the cause of such a gathering, introduced Mr. Samuel L. Clemens as the first reader. Mark Twain — as we all know him — immediately put his audience into a joyous mood by reading extracts from his "English as She is Taught."

This, having since appeared in *The Century Magazine*, has doubtless been heartily enjoyed by readers all over the land. But it is safe to say that only those who heard its author read those children's mistakes in his inimitable way could enjoy to the full their humor.

Under the magic wand of Professor Norton, the genial Autocrat, Dr. Oliver Wendell Holmes, was the next to appear. He recited, first, what many think his best poem, "The Chambered Nautilus." How is it possible to ever again think of these verses without seeing that upturned soul-face so impressively repeating them? His second recitation was "Dorothy Q.," which he prefaced with an interesting sketch of its origin.

Mrs. Julia Ward Howe, being next introduced, graced the occasion with her "Weave no more silks, ye Lyons looms" (Our Orders) and her stirring lyric, "Mine eyes have seen the glory of the coming of the Lord." She added a special laurel to the memory of Longfellow by reading a new poem in his honor.

Mrs. Howe was followed by Dr. Edward Everett Hale, who, Professor Norton happily said, was the "preacher, the historian, the philanthropist, the story-teller, the half-dozen good men in one." He might have added, the poet, for Dr. Hale read his telling poem, "The Great Harvest Year."

When next Mr. Thomas Bailey Aldrich came forward as the pearl whom Professor Norton — using a pleasant simile of Browning — had dived for, who could help wishing to hear some of his dainty poems? But, instead of such, he did the next best thing,

read that chapter of adventures in "The Story of a Bad Boy" which contains the "perfection of pith and poetry," —

"Root beer
Sold here!"

"Not a word to spare and yet everything fully expressed. Rhyme and rhythm faultless."

After Mr. Aldrich had had the honor — "the paralyzing honor," as he expressed it — of thus bodily appearing before his public, Colonel Thomas W. Higginson was introduced with appropriate honor.

The happy rendering of his humorous essay, "Vacation Saints," left the audience in just the atmosphere to thoroughly enjoy Mr. William D. Howells. After delicately showing his appreciation of Professor Norton's introduction, he read two selections from "Their Wedding Journey"; the first, where Basil is trying to understand Isabel on the island at Niagara, and the second, that exquisite little picture of the gentle nun giving the cloistered rose to Isabel. "Cold and pale and sweet — was it indeed only a flower, this cloistered one of the Hôtel Dieu?"

This vivid modern depicter of society's men and women was followed by our pioneer in such work, George William Curtis, the author of The Potiphar Papers. With charming grace and strength this gentleman, who, as Professor Norton said, "amply repelled in himself the charge, too often, too loosely, too meanly repeated, that ideal pursuits unfit their high followers for practical counsel and action," read the letter of Mrs. Potiphar to her friend Caroline, which describes her efforts to obtain a livery.

It remained for the Hon. James Russell Lowell to fitly close these rare exercises. After being introduced in the words of Shakespeare and enthusiastically received by the audience, he began by saying that it seemed to him particularly inappropriate, to say the least, for such an occasion to pass without a poem of him whom they were commemorating being read. He had accordingly begged the privilege of reading "The Building of the Ship." As president of the Longfellow Memorial Association this seemed particularly appropriate for him to do. He personally honored his brother-poet and friend by following this with some verses he wrote to him on his birthday, February 27, 1867: —

"I need not praise the sweetness of his song," etc.

In this delightful manner passed the three hours these gifted ones favored us with their presence. It was a rare occasion, to be remembered not only for the material aid it afforded to the Longfellow Memorial Fund but for the opportunity of rendering personal appreciation to those through whom the creative spirit works for our edification and profit.

THERE is absolutely no use trying to float a boat upstream in a strong current. A teacher may hate personalities with all the cultivated bitterness possible, but his pupils, being more in the modern spirit, will like them without suspecting that there is anything doubtful in such a liking. In other words, the growth of individuality in the world demands more and more knowledge of personalities. People who do not agree with this idea will refuse to believe that the current of popular feeling in this matter is leading toward any good. But unphilosophical people, and also those who look at least half-way through the necessary relation of the things that happen to the things that ought to happen, believe that the present keen interest in personalities — and in literary personalities particularly — means a good deal in the growth of mutual human sympathy and understanding.

ALL this apropos of the Authors' Readings in Boston Museum, on the last day of March, in aid of the Longfellow Memorial Fund. Every teacher who was present on that memorable occasion took away something definite to give as well as much to keep as a part of life. It was well worth while to see our greatest living authors together at such a time and for such a purpose. The teacher who was drawn a little closer into the feeling of universal brotherhood by seeing and hearing these people, whom he might never chance to see and hear again, could talk of their work to his pupils in a more tangible way than is possible to those to whom the personality of an author as a human being is altogether abstract.

MR. JOHN MORLEY'S strong and serious address on the Study of Literature, given before the London Society for the Extension of University Teaching, is already accessible to

every student. Mr. Morley's advice to read something worth while for at least half an hour a day ought to be written in large letters on the working conscience of every person who has anything to do with guiding and shaping the tastes of others. Newspapers are certainly coming slowly but surely up to a higher level in certain departments, but the best that appears in the modern newspaper is often put afterward into book-covers; and it is not worth a thoughtful person's while to forget entirely the pleasure that is to be found in books — although this world is flooded with newspapers.

PRESIDENT SHELDON is to congratulated upon his success thus far in arranging for the great meeting of the National Educational Association at Chicago next July. It bids fair to prove one of the largest, if not absolutely the largest, educational meeting ever held in this country. It ought to be also *the best.*

President Hall is apparently trying to outdo all his predecessors in his plans for the next meeting of the American Institute of Instruction at Burlington.

The indications are that all New England and a good part (the *best* part) of "the rest of mankind" will be there. A capital meeting, which will do much for the cause of education in New England, may safely be predicted. Every teacher who can should attend one or both of these meetings.

GENERAL WALKER thinks that puzzles should have no place in arithmetic. Our readers will probably think they should have no place in an educational magazine. It would "puzzle a Philadelphia lawyer" to read good sense into the lines at the bottom of page 570, top of page 571, bottom of page 571, and top of page 572. But it is easy enough when you know how. It is like the clock which to most persons told the wrong time of day, but was correct to the owner, who explained that "when my clock points to twenty minutes past five and strikes seven, then I know that it lacks a quarter of twelve." The explanation in this case is as follows: take the first line from the top of page 572 and place it at the top of page 571, and all is plain.

MISCELLANY.

ORDER OF TOPICS IN PHYSICS. — The article on this subject in the February number has drawn letters from some of the best teachers of natural science in the country. Most of the writers commend the positions taken in the article. Some of these letters embody such excellent principles and suggestions concerning the true method of teaching these subjects, that the following quotations appear to be warranted, and without doubt will be highly appreciated and prove useful.

A distinguished teacher of science in one of the best high schools writes as follows: —

"I am a stickler for the development of the scientific imagination, the ability to see in the mind's eye the unseen, and to form definite concepts of it. I can do this best by proceeding from known to unknown, from movements of masses to movements of molecules, from transmission of energy from mass to mass to transmission of energy from molecule to molecule, from transference of energy to transformation of energy, from waves of water and lines to waves of sound and light, and then to heat, and then to that thrill which we call electricity. While teaching these later subjects, I have material analogies for whatever comes up. I cannot teach how a current of heat or of electricity flows, without having carefully considered how a current of water flows. I base my whole idea of potential on pressure and flow of water. Moreover, I think it a good plan to put my pupils at good stiff work at first, to see what they are made of. If they cannot be got to work on the first part, they are generally weak sisters who will fall back the first hill they come to climb. The first chapters are my foundation. I lay that firmly first. It is not as much fun to build foundation as to see the house going up; but the foundation must be laid, and I do not know as we ought to yield to the tastes of some who are too dudish to dig, and build the house first, then come back and shove the foundation under it afterwards, or leave it without one. I believe in hard work for hard work's own sake, and I am not in favor of yielding real drill. I will not baby my pupils. I will not mum their food for them. I will not try to remove all their difficulties. I think a teacher ought to make himself as useless to his pupils as possible; that is, teach them to get on themselves without him. At the same time he must furnish encouragement, correct principles, clear methods, accurate conceptions, and all incentives to good work, which latter he must insist upon."

Here is broad common sense which is earnestly commended to teachers of other subjects besides natural science.

The next extract is from an eminent professor in a New England college, and embodies some important principles of teaching.

"The article in EDUCATION for February, on teaching physics in schools, has interested me very much. It is undoubtedly in the right direction — one which theoretical educators and would-be 'high scientists' have got to take before scientific education becomes what it ought to be. Theorists in science are trying to do what it seems to me classical educators (with more reason) have already done in their line, to the great detriment of classical education, namely: begin at the highest point reached by advanced students and work backwards. Facts and phenomena, rather than science, are the proper things to be taught to the young. Until a young man has reached twenty years and has a thorough background of mathematics, a precise and discriminating use of language, and some maturity of analytical thought, the teaching of 'science,' as such, is out of the question, and the attempt does more harm than good.

"The advantage that the classics have in the matter of school-training is that the facts are of an order suited to experience of childhood and the analytical processes capable of being mastered by immature minds. I must say, however, that there seems to me to be a tendency to press the analytical powers too early and too strongly, even in classical studies. Up to twenty years (in average cases of those worth educating) mathematics gives the best training for the logical powers; classics for the imagination and the analytical powers; then science may begin. Meanwhile, the knowledge of facts on which science is based ought to have been laid, and the nomenclature to be employed have become somewhat familiar. In doing this work the order of subjects and their logical sequence is of very little importance as compared with the awakening of interest and of a curiosity which shall fix the facts in the memory. All this has the same relation to the teaching of science as the digging of a cellar and the laying of the foundation stones has to the building of a house. When the carpenters come to do their work, they will pursue a very different method and use very different tools. The whole subject of 'practical' education is to be worked out in the next generation or two, and I am glad to see the record of an experiment which confirms what I have long held to be the true direction — 'facts' for childhood, 'analysis and correlation' for maturity of powers, yet neither absolutely divorced at any stage of their progress."

RELIGION IN THE PUBLIC SCHOOLS.

MR. W. A. BELL, the editor of *The Indiana School Journal*, recently sent the following question to several distinguished educators, and in the January number of his excellent magazine published their answers as a "symposium."

The question was as follows: —

"*Should religion be taught in the public schools? If so, how?*"

The subject is discussed by Dr. George P. Brown, editor *Illinois School Journal;* Dr. Edwin C. Hewett, President Illinois State Normal School; Prof. E. E. Smith; W. W. Parsons, President Indiana State Normal School; Dr. E. E. White, Superintendent of Schools, Cincinnati, Ohio; W. N. Hailman, Superintendent of Schools, La Porte; J. H. Martin, Superintendent of Schools, Madison; Lewis H. Jones, Superintendent of Schools, Indianapolis; Nebraska Cropsey, Superintendent of Primary Schools, Indianapolis, and Alexander Martin, President of DePauw University.

These papers all agree, with a striking unanimity, that religion *should* be taught in the public schools. Dr. White puts his argument so tersely and so cogently that it is reproduced here without abridgment: —

CINCINNATI, Ohio, November 30, 1886.

MR. BELL, — In determining the place of religion in the public schools, it should be kept in mind that the central and most important duty of the school is effective moral training, and hence that *whatever is an essential means to such training* should have a place in school instruction and discipline.

Both reason and experience show that the religious motives transcend all others in their influence on the will, and hence on character. The exclusion of all such motives from the moral training of the young will not stand the test of life. It follows that the use of religious sanctions and motives is essential to vital and effectual moral training; and so the only debatable question relates to the *extent* and *manner* in which such sanctions and motives should be used in the public schools, and this is largely a question of *conditions*.

In considering this question a clear distinction must be made between technical religious instruction and the use of religious sanctions and influence, and also between the latter and formal religious worship. There may be an effective use of religious motives in school-training without the formal teaching of the catechism or the Bible, and also

without formal religious worship — though the latter may be the most impressive form of religious influence. Bible instruction and formal worship may be rendered inexpedient by the diverse religious faith and training of the pupils, but no diversity of religious faith requires the exclusion of all reference to God and immortality from any school. No question of conscience thus arising can set aside the imperative necessity of effective moral training in a public school, and thus the supreme purpose of the school sets a limit to the exclusion of needed religious influence.

Besides, the attempt to exclude all religious truth and influence from the public school involves the exclusion not only of the Bible, but also of the highest and best in literature, music, and art, for these are permeated by religious ideas and sentiments. The removal of all the books containing religious truth from any public library would leave many, if not most, of the shelves empty. Indeed, it is impossible to teach the meaning of the abbreviation A.D., or of the date at the head of this letter, without referring to religious knowledge.

The position that all religious truth and sanctions should be excluded from school-training is not only subversive of the central purpose of the public school, but is wholly *impracticable*. It is impossible to draw a line through human knowledge, dividing the religious from the non-religious, and then put school-training entirely on one side of this line.

Most truly yours, E. E. WHITE,

Superintendent of the Cincinnati Schools.

SWEET HOME.

BY JULIA H. MAY.

AN Eskimo, from ice-bound native cot
Conveyed to land of roses and of vines,
Is homesick. Gardens where entwines
The purple-hued wistaria, the spot
Where lilies-of-the-valley bloom, are not
So beautiful to him as scraggy signs
Of life that girt the hill of home. He pines,
He sickens. When the summer sun is hot,
"Oh, could I feel," he cries, "the Arctic blast!"
"Oh, could I guide once more my rude canoe!"
They bear him northward. Life is ebbing fast,
But when the frozen shore his sad eyes view,
Light glimmers through the homesick lids. He cries:
"I see the ice!" and with a smile, he dies.

FOREIGN NOTES.

GREAT BRITAIN. SCIENCE IN TECHNICAL INSTRUCTION. — Every day gives new proof of the great general interest which the subject of scientific and industrial training has excited throughout England. Since the address of Professor Huxley at the meeting in support of the Imperial Institute, noticed in the March number of EDUCATION, the most important utterance upon the subject has been the speech of Lord Hartington before the Polytechnic Institute founded by Mr. Quinton Hogg. Lord Hartington took for his text the declaration of Professor Huxley, that "the conditions of industrial training at the present time amount to a state of war," which view he proceeded to emphasize from the standpoint of the practical statesman. He pointed out that the industrial supremacy of England depends more upon the efficiency of individual workers than upon the stores of iron or coal. "If ever," he said, "our raw materials could be manufactured for the uses and wants of the world better in other countries than in our own, we should become the slaves and servants of the rest of the world, instead of its leaders and masters, as we have been hitherto." In Lord Hartington's opinion, neither the State nor the bounty of private individuals can make adequate provision for the demands of industrial training. The main support must come from municipal institutions.

Following close upon Lord Hartington's address comes a letter from Professor Huxley on the "Organization of Industrial Training." Space does not permit me to mention even the agencies he enumerates, which wait the means and the brain by which they shall be brought into forceful union. I quote a single sentence from his letter, which is not without its application to our own country. "Economy does not lie in sparing money, but in spending it wisely. And it is, to my mind, highly necessary that some man or body of men, whom their countrymen trust, should consider these various organizations as a whole, and determine the manner in which they should be correlated, and in which it is desirable that the resources, public and private, which are available should be distributed among them."

SUPPLEMENTARY VOTE FOR THE SCIENCE AND ART DEPARTMENT. — The parliamentary vote to the Science and Art Department for the current year amounted to £400,043 ($1,944,000). The sum having proved inadequate, a supplementary estimate of £10,560 has just been voted.

In connection with this vote, several interesting speeches were delivered in the House which afford a clear insight into the present status of technical training in the kingdom, and of the views entertained by those who are its most zealous advocates. Mr. Mundella called attention to the fact that the total number of pupils in every branch of art instruction maintained by the department had risen from 444,000, in 1875, to 883,000 in 1887. He also noted that while the public expenditure on education in England was only five per cent. of the total expenditure of the country, in some other countries, as, for example, Switzerland, it was rather more than one third.

Professor Stuart observed that the value of the training afforded by the department was lessened by the want of elementary training on the part of those who attended its classes. He urged that the government should provide greater facilities for the teaching of science in day schools and in preparatory evening schools.

Another important point brought forward by Professor Stuart was that of technical teaching in evening classes, so that the minds of workmen might be concentrated on branches of work not easily acquired in the workshops. An immense impulse had been given in the right direction, he said, when the examination in chemistry had been made a practical one, instead of merely book-work and paper-work, and a similar change would have a good effect in the case of physics and mechanics. In this connection it is interesting to note that several schools of science and art in the colonies of Great Britain have expressed a wish to be allied with the Department of Science and Art, and to have the advantage of its examinations.

Professor Morley on the Study of Literature. — In view of the great and growing interest which is everywhere manifest in respect to science and technical training, it is important that teachers should keep clearly in view the claims of those studies which more directly affect character and conduct. Among these, literature stands preëminent. Its scope in a scheme of education could not be more exactly defined than was done by Professor Morley in a recent address on the subject. His views carry the more weight from his evident appreciation of the value of science and its practical applications. "We shall never," he said, "hold our industrial preëminence and all that hangs upon it, unless we push on scientific, technical, and commercial education with all our might. But in cultivating literature, we shall be developing that side of us which gives ability and substance to character, gives to us all the ideas that we hold to-day, and further adds a solid backing of precedent and experience."

HUNGARY. REPORT OF M. AUGUSTE TRÉFORT, MINISTER OF PUBLIC INSTRUCTION. — The minister of public instruction and worship for Hungary, M. Auguste Tréfort, has recently presented to parliament his report upon the state of public instruction for 1885–86. The report not only gives a detailed view of the present conditions, but contains an interesting survey of the progress accomplished in the various classes of schools since the adoption of the constitution of 1867. The law of 1868, which made primary instruction obligatory and gratuitous, has been fruitful in results. In 1885–86 the number of primary schools in operation was 16,305, frequented by 1,428,039 children, equal to 85 per cent. of the population 6 to 12 years of age. The number includes 629,349 youths from 13 to 15, who followed the course of the continuing or review schools. The teaching force numbered 20,194 male, and 2,663 female, teachers. It would be impossible here to note even the totals relating to secondary and superior schools. We must content ourselves with a mere reference to schools and courses for special instruction.

Provision for industrial training has existed since 1850, but the instruction and training of apprentices was not brought under the control of the law until 1884. It was then decreed that every commune in which were found fifty apprentices should establish a special school for their benefit. The prescribed course for these schools covers four years, the first being preparatory in its nature. The subjects of primary school instruction are here reviewed with extended courses in simple and geometric design. At the end of 1886 there were 2,055 schools of this kind in 198 communes. The pupils in the same numbered 36,000. Practical industrial training is given in art and trade schools, which number in all 68, namely: 20 for weaving, 18 for woodwork, 21 for work in iron, 4 for ceramics, and 4 for diverse arts. Within the last few years the government has turned its attention to fostering native industries by means of industrial training in the popular schools. As a result of these efforts, the training has been introduced into 919 elementary schools. In Hungary, as in most European countries, ample provision is made for the higher orders of industrial training. Of five institutions classed under this head, the "School of Applied Arts" is most recent in origin, dating from 1880. Besides the schools of industrial art, Hungary possesses thirteen secondary schools of commerce and two academies of commerce.

On the whole, the interesting report of the minister makes it evident that Hungary is straining every nerve to conquer a worthy place in the ranks of the most cultivated people.

Progress of Education in France. — Every one familiar with the history of education under the French Republic knows the pride with which the successive ministers of public instruction have been wont to dwell upon the evidences of progress. M. Berthelot, the present minister, is no exception to the rule. In the recent debate upon the budget he made some impressive comparisons. Thus, the students in the learned faculties, which in 1876 numbered 7,270, have increased to 17,800. The pupils in the *lycées* and colleges have reached the total of 100,000, including 9,600 young women. In ten years the number of primary schools has risen from 61,000 to 69,000, with 102,000 teachers and nearly 5,000,000 pupils. As the most important event in the scholastic history of the republic, M. Berthelot notes the reëstablishment of the superior primary schools, which now number nearly 700, attended by 30,000 pupils. The proposition for the establishment of a chair of the science of education in the Faculty of Paris was carried in the Chamber of Deputies, and Prof. H. Marion, whose fame is not unknown among us, will be the first incumbent. A. T. S.

CURRENT EDUCATIONAL LITERATURE.

National Review (April), "The Endowed Schools Inquiry," by Lord Colchester.

Lippincott's (May), "Social life at Vassar," by L. R. Smith.

La Critique Philosophique (March), "Intellectual Education according to Herbert Spencer," by Lionel Dauriac.

The most fruitful article of any which has appeared in *The Century*, from an educational point of view, is Mark Twain's apparently flippant review of "English As She Is Taught," by Caroline B. Le Row. The difficulties of American primary and secondary teaching have never been more effectually brought to the notice of thousands than in this serio-comic article, which will set many thinking upon a subject now really brought home to the popular mind.

Prof. Charles Eliot Norton is advisory editor of *The American Journal of Philology*, and Dr. A. Emerson and Dr. H. N. Fowler, both also of Harvard, are editorial contributors.

Prof. Ferdinand Bôcher contributes the leading article to the April number of *The Harvard Monthly*, "On some Manuscript Marginal Notes by Sainte-Beuve."

The Forum (April), "Books that have helped me," by Prof. William T. Harris. No student of mental science, and therefore no teacher, can afford to miss reading this article, which is really a picture of the "inner judiciary" of Dr. Harris.

CURRENT LITERATURE.

THE "Life of Bishop Fraser," by Mr. Thomas Hughes, is one of the books of the month which will be widely read. This will be in part due, of course, to the interest of the public in everything that Mr. Hughes may write for his own sake; but his subject is a character even more beloved, if possible, than himself. Bishop Fraser was an educator in the broadest sense of the term, a man whose life was a part of his time; he was interested in all contemporary movements and endowed with as much simplicity as earnestness. His first and most famous school report was a comprehensive review of the social state of the people. Gladstone appointed him Bishop of Manchester in 1870, because he knew so much about the question of education. Through all of his life Bishop Fraser was a man of action, a sympathetic worker, and Mr. Hughes has given us a true picture of a worthy subject in this biography.

The Rev. Dr. Samuel Harris, of Yale, offers his book, "The Self-revelation of God," very modestly to the public. He does not think that he has given "a complete presentation of the reasons for believing in the existence of God, the reality of his revelation of himself, and the harmony of Christian theism with empirical and philosophical science." His hope is to aid seekers after truth, and he cannot fail to realize his hope. For in these days the faith which is not afraid of the searchings of reason is that which will stand both tests which will be applied to its literary expression — the scholarly and the inspirational.

What does this flood of romantic stories mean? Why is Mr. Rider Haggard such a success? Why are books like "Jess" and "She" selling by the hundred thousand? May it not be that underneath this popular love of the absurdly and palpably supernatural there is latent a tendency towards a more general confession of the reality of spiritual things? One must be very hopeful even to ask the question; but is it not possible that out of all this seething torrent of impossible stories we may by-and-by have an enduring romantic novel; or has the time gone by for all that? And is the romance of the future all to be found in the apparently commonplace happenings of commonplace lives, glorified by high ideals of love and duty?

"Margaret of Angoulême" is the last published of the No Name Series of Roberts Brothers. This biography is by Miss A. Mary F. Robinson, and is written in a simple, straightforward manner, giving

the story of the gentle Queen of Navarre in a charming and most liberal minded fashion.

Miss Sarah Orne Jewett has written the "Story of the Normans" in the Stories of the Nations Series in rather a romantic, yet, it must be confessed, a very happy, manner. She seems to dwell upon our relation to the Normans somewhat more than is quite justifiable for an American writer, but the volume is thoroughly worthy of the Putnams' series, and that is saying a great deal in its praise.

"Two Gentlemen of Boston," an anonymous novel from Ticknor's, and "Two Gentlemen of Gotham," from Cassell's, are the names of novels of the month which show each a certain amount of crude power of emotion, if not of literary expression.

It is the pleasure of some people to say that Mr. Robert Louis Stevenson is like Hawthorne. It is hard to detect the Hawthorne quality in his work exactly, unless it lies in the fascination to be found in it. "The Merry Men and Other Tales and Fables" will make many readers forget care while its pages are open before them, and in spite of the endless discussion about idealism and realism. Is that not what all unliterary people want of a novel? The student of literature necessarily regards novels in a different light from that of the usual novel reader. To the student, each novel of any literary value whatever has a certain historical relation.

The most important historical book published this year comes now through the Scribners in Dr. William Dickson's translation of "The Provinces of the Roman Empire from Cæsar to Diocletian," by the famous historian, Dr. Theodore Mommsen. Of the scholarly strength of this book it is scarcely necessary to speak. The profundity and accuracy of a great historical work, henceforward indispensable to every good library, places it outside the province bounded by these discussions of Current Literature.

AMONG THE BOOKS.

DANTE HANDBOOK. By Giovanni A. Scartazzini. Translated from the Italian, with notes and additions, by Thomas Davidson, M.A. Pp. 315. Ginn & Co., publishers.

This handbook contains everything necessary to enable the student to study intelligently the great Christian poet. It is divided into two parts: the first treating of Dante's life; the second, of his works. To every section is appended a valuable bibliography, and these bibliographies, taken together, form an excellent catalogue of a Dante library. The translator's notes and additions will add to the value of the book for American students. This book supplies a need that has long been felt by students.

GRIMM'S MAERCHEN. Selected and edited with introduction, notes, and vocabulary. By Chas. P. Otis, PH.D., Professor of Modern Languages, Massachusetts Institute of Technology. Pp. 351. $1.25. New York: Henry Holt & Co. Supplied by Laughton, MacDonald & Co., 131 Tremont Street, Boston, Mass.

This book is especially suited for early reading in German, on account of its simplicity of style and attractiveness of subject. The vocabulary involved embraces the everyday words most naturally learned at first. The stories which constitute the book were obtained from the oral recitals of the country people, and put in writing and gathered into a collection by Jacob and Wilhelm Grimm. The student will, by reading these, gain a good knowledge of an essential part of German life and literature.

THE CASSELL NATIONAL LIBRARY continues to issue interesting and valuable books by various authors, and on numerous subjects. No. 57. PLUTARCH'S LIVES OF PERICLES AND FABIUS MAXIMUS, DEMOSTHENES AND CICERO. No. 60. THE DIARY OF SAMUEL PEPYS, 1663–1664. No. 61. THE TEMPEST. By William Shakespeare. No. 62. ROSALIND. By Thomas Lodge. No. 63. ISAAC BICKERSTAFF, Steele's Tattler. Subscription price per year, $5.00. Ten cents a single copy.

THE CITIZEN AND THE NEIGHBOR; or, Men's rights and duties as they live together in the State and in society. By Charles F. Dole. Boston: Unitarian Sunday-school Society. Pp. 100.

This manual is not designed merely for Sunday schools. It is thought that its unsectarian character may make it of use also in secular schools, in which some instruction is felt to be necessary to fit our students for the duties of citizenship. The questions are intended not only to elicit answers to the text, but also to suggest further study of the subjects. It is a capital little book for every intelligent man to read.

NATURAL LAW IN THE BUSINESS WORLD. By Henry Wood. Boston: Lee & Shepard. Pp. 222. 75 cents.

The aim of this book is to expose the abuses and evils which masquerade under the banner of Labor, and the bad results of class prejudice and antagonism. The much discussed labor question is here considered with the view to showing the results of labor combinations and their effect on the laborer; socialistic tendencies; excess of economic and railroad legislation; the distribution of wealth; principles governing corporations and railroads, and also many other prominent issues. These subjects are treated with the view of

gaining right ideas, and of finding the best solution to these difficult questions.

A DAY IN ANCIENT ROME. Being a revision of Lohr's Aus Dem Altem Rom. With numerous illustrations. By Edgar S. Shumway, Professor of the Latin Language and Literature in Rutgers College. Boston: D. C. Heath & Co. 1887.

All who are interested in the city of Rome, its history, its authors, and its ancient public buildings, will find this book of great value and interest. It is intended as a help to those who are studying the Latin authors, but is equally appropriate for those who are not Latin scholars. The book contains many fine illustrations of the ancient arches, baths, and other buildings, with a large number of heads of the famous men and women, and several maps showing the locations of the different places of interest.

KRUSI'S DRAWING MANUAL FOR TEACHERS. A graded course. Analytic series. By Herman Krusi, A.M., Instructor in the Philosophy of Education at the Normal and Training School, Oswego, N. Y., and formerly teacher of drawing in the Home and Colonial Training School, London. New York: D. Appleton & Co. 1887. Pp. 209.

Since drawing has become so important a branch of the school-work, and so many of the best designers of the country have found their talent by learning the principles of the art in the schoolroom, it is important that the teachers should be familiar with the analytical course. This book begins at the first principles, and describes the method of analyzing the object by dividing it into its various parts. The method of conventionalization is fully described. The author has made the study much simpler by various illustrations and designs. Any one who is interested in drawing will find this book of great advantage.

RIVERSIDE LITERATURE SERIES. THE GOLDEN LEGEND. By Henry W. Longfellow. With notes by Samuel Arthur Bent, A.M. In two parts. Part I. This series is issued monthly by Houghton, Mifflin & Co., Boston. The single numbers are 15 cents; the yearly subscription (9 numbers), $1.25.

ELEMENTARY TREATISE ON DETERMINANTS. By William G. Peck, PH.D., LL.D. New York: A. S. Barnes & Co. 75 cents.

Professor Peck originally prepared this little treatise for the use of a class of students about to enter upon a course of modern coördinate geometry. Recent advances in mathematics demand an acquaintance with the elementary principles of determinants. The book will meet the growing want and be received with favor by all teachers of these higher phases of mathematics.

EDUCATION IN ALASKA. With maps and illustrations. By Sheldon Jackson, General Agent of Education in Alaska. Pp. 89. Published by the Government. 1886.

Dr. Jackson has again laid us all under obligation for this interesting and exceedingly useful *résumé* of the educational condition and progress of this far-away land.

The illustrations add materially to the value of the book. At the end of the volume is inserted an accurate map of this famous country. The rapidity with which interest in Alaska has increased within a few years among the people of all parts of the United States is but little short of marvelous. During the coming summer hundreds of persons from the East, the South, and the West will visit Alaska. The boats from Puget Sound to Alaska, two years ago, ran once a month. During the coming summer they will run every week, so rapidly has the quantity of freight and the number of passengers increased.

ELEMENTS OF PHYSIOLOGICAL PSYCHOLOGY. Treatise of the activities and nature of the mind, from the physical and experimental point of view. By George T. Ladd, Professor of Philosophy in Yale University. Pp. 696. New York: Charles Scribner's Sons. 1887. $4.50.

This new work, just from the prolific press of the Scribners, will undoubtedly attract wide attention, and, unless we widely mistake, will prove extremely popular among students of psychology. Professor Ladd's treatment (1) of the nervous system; (2) of the correlations of the nervous mechanism and of the mind; and finally, in the light of these two departments of his study, (3) the nature of the mind, are vigorous and fully abreast of the latest forms of knowledge upon these great themes.

Students of psychology will read with constantly increasing interest in the subject, and respect for the writer, his discussion of the unity of the mind, its development, the real connection of brain and mind, and, finally, the mind as real being. Among the characteristics of this book worthy of special notice must be mentioned the evidences of the learning and ability, especially the broad reasoning power, of the author, his candor and honesty, and the general fairness of his treatment of every topic. One can hardly fail to admit his conclusions, his premises and his mode of treatment are so eminently fair and candid.

REALISTIC PHILOSOPHY. Defended in a Philosophic Series. By James McCosh, D.D., LL.D., LITT.D., President of Princeton College, In two volumes. Pp. 252 and 325.

The first volume is "expository;" the second volume is "historical and critical."

Few writers on philosophy at the present day equal the vigor and force of Dr. McCosh. His writings are widely known and as widely read. In these volumes he explains and defends realism. First of all he tells us what he thinks an "American philosophy" should be. In the first volume the author discusses with the utmost vigor and exactness various "criteria of divers kinds of truth;" "energy — efficient and final cause;" "development;" "certitude, providence, and prayer."

But it is in the second volume that — the *débris* being brushed away — we find the nutritious meat of strong thought. His review of the philosophy of Locke, of Hume and Huxley, of the Scottish school, of Kant, and, finally, of Herbert Spencer, is thorough, critical, and exceedingly interesting. Whether one agrees with the author in all his conclusions or not, he must admire the force, originality, and honesty of his treatment of the great themes which he so easily discusses.

THE WILLIAM HENRY LETTERS. By Abby Morton Diaz. With illustrations. Pp. 257. Boston and Chicago: Interstate Publishing Co. 80 cents.

The William Henry Letters are too well known to need a single word of comment. The book is unique. William Henry was a boy. All teachers will not only enjoy the book but will profit by it.

MANUAL OF PENMANSHIP. Designed to Accompany Harper's New Graded Copy-books. By H. W. Shaylor. Pp. 84. New York: Harper & Brothers. 1887.

This is a capital little treatise on "How to Write Correctly." Every teacher of penmanship, whatever copy-books he may use, will find this a valuable aid in teaching the art. It is thorough, full, and philosophical. Its practical directions in regard to position at the desk, classification, holding the pen, criticism, blackboard

work, the thorough and complete analysis of the letters, etc., are exceedingly valuable to the teacher. We have many handbooks for the teacher's use upon this subject, but rarely, if ever, have we seen one superior, or even equal, to this. It can be most cordially commended to all teachers of writing.

NEW GERMAN LEITFADEN. A thorough Grammatical and Conversational Textbook according to the Natural Method. With a complete vocabulary. By Edwin F. Bacon, Professor of Modern Languages at the Hasbrouck Institute, and of German at the Sauveur College of Languages. Pp. 276, 8vo, cloth. New York: Clark & Maynard. Price, $1.50.

This book meets a real want by its skilful employment of the natural, or coversational, method without the sacrifice of the grammatical thoroughness essential to a complete knowledge of the language. It is divided into two parts: the first, a conversation grammar arranged in concise single-page lessons, remarkably convenient for reference; the second, a choice collection of short stories, dialogues, and songs with music, to which is added a complete German-English vocabulary.

ENGLISH AS SHE IS TAUGHT. Genuine Answers to Examination Questions in Our Public Schools. Collected by Caroline B. LeRow. New York: Cassell & Co. For sale by Laughton, MacDonald & Co., Boston. Price, 50 cents.

This unique little book is having a very wide sale. It is so full of queer things that it turns up a constant surprise to the reader. Mark Twain calls it "a darling literary curiosity." The substance of the book is to give queer answers to questions, especially definitions of words. These are grouped under fifteen heads, from "analytical" to "metaphysical." One pupil says that "aboriginal" means "what was original before," and another that "aboriginate" is "to settle down in a place."

Many a teacher will laugh and claim to be able to match the following definition of a circle: "A circle is a round straight line with a hole in the middle." Every teacher who buys the book will be sure to enjoy it.

SOCIALISM AND THE CHURCH; or, Henry George *vs.* Archbishop Corrigan. By Rev. Willibald Hackner, Priest of the Diocese of La Crosse, Wis. Pp. 59. New York: The Catholic Publication Society Co. 1887.

This is a vigorous attack upon Henry George's land theory, from the standpoint of the doctrines of the Catholic Church. To all interested in the discussion of such questions it will prove interesting reading.

PAMPHLETS RECEIVED.

The Best One Hundred Books, containing Sir John Lubbock's list and additional suggestions by Ruskin and others. New York: E. L. Kellogg & Co. 1887.

Books for Young People. A general catalogue and order list of the Treasure-trove School and Family Library. Part I. New York: E. L. Kellogg & Co. 1887.

Annual Report of Public Schools, Gloucester, Mass. 1886.

Report of the School Committee of Hyde Park. 1887.

Relation of the State to Industrial Action. Vol. I. No. 6. Publications of the American Economic Association. By Henry C. Adams, PH.D.

Report of the Superintendent of Public Instruction of Nevada. 1885–86.

Report of the Superintendent of Public Schools of the City of Burlington, Vt. 1887.

Report of the Indian School Superintendent. 1886.

Circulars of Information of the Bureau of Education. No. 2. 1886.

Report of Superintendent's Department. 1886.

Third Annual Report of the Home for Aged Couples.

MAGAZINES RECEIVED.

— *St. Nicholas.* For Young Folks. Conducted by Mary Mapes Dodge. The Century Co., New York. 25 cents a number; $3 00 a year. A particularly interesting number.

— *Popular Science Monthly.* Conducted by E. L. and W. J. Youmans. D. Appleton & Co., 1, 3, and 5 Bond St., New York. 50 cents a number; $5.00 a year. The articles in this number embrace nearly all the branches of science and are adaped to the beginner as well as to the scientist.

— *The Atlantic Monthly.* Houghton, Mifflin & Co., Boston and New York. Single numbers, 35 cents; $4.00 a year. The April number contains a fine portrait of Dr. Holmes, a poem entitled "On the Big Horn" by John Greenleaf Whittier, an article by Edmund Kirke, giving "A suppressed chapter of history" and many other equally interesting articles.

— *Cassell's Family Magazine.* Cassell & Co., New York. 15 cents a number; $1.50 a year. Besides its interesting stories, it contains articles of practical value, as "Our breakfast beverages" and "Is it the water, I wonder?"

— *The Catholic World.* (Monthly.) The Catholic Publishing Society Co., 9 Barclay St., New York. 35 cents a number; $4.00 a year. Particularly noticeable are the second part of "Mr. Thomas Chiver's boarder" and the installment of Rosa Mulholland's "A fair emigrant."

— *The American Magazine.* (Monthly.) 130 and 132 Pearl St., New York. Price 25 cents; $3.00 a year. Magazine readers will hardly recognize in The American Magazine their old friend The Brooklyn Magazine. The latter was always popular among those that desired refined and literary reading, but under the new name of The American Magazine it deserves and will receive much greater popularity.

— *The Quill.* Staten Island Academy and Latin School. An article on "Olden times" is worthy of mention.

— *The English Illustrated Magazine.* (Monthly.) Macmillan & Co. 15 cents; $1.75 a year. Among the attractions of this number are a biographical study by Miss Matilda Stoker, "Sheridan and Miss Linley, as shown in their letters," and many beautiful engravings.

— *American Art.* Illustrated. (Monthly.) American Art Magazine Co., 179 Tremont St., Boston. 25 cents a copy; $2.50 a year. The March number contains a fine engraving of a section of a dining-room, gives an excellent account of the last exhibition of the Boston Paint and Clay Club, and miscellaneous topics and art notes.

— *Wide Awake.* Illustrated. (Monthly.) D. Lothrop Co., Boston. Price 20 cents; $2.00 a year. One of the most popular of the children's magazines. The Easter number is particularly attractive.

— *Lend a Hand.* Published by Lend a Hand Company, Boston. $2.00 a year. A monthly magazine of organized philanthropy. Edward Everett Hale, editor.

— *The Young Idea.* Gloucester High School. The first installment of the prize story, entitled "The ghost of the grange," by Dolly M. Davis, shows considerable ability. Success to these high school papers as efficient aids to education!

— *The Open Court.* Chicago. 5 cents a number; $3.00 a year. A fortnightly journal devoted to the work of establishing ethics and religion upon a scientific basis.

— *Illinois School Journal.* Bloomington, Ill. $1.50 a year. The magazine covers the subjects of pedagogics, primary schools, intermediate and higher schools, supervision, rural schools, and so forth. It is *one of the best.*

— *Common School Education* for May opens with an article entitled "Official etiquette," by Warren P. Adams, giving directions in regard to the proper methods of addressing national, state, and municipal officials. The series by Dr. Larkin Dunton, on "Primary arithmetic," and Dr. Calkins, on "Phonetics," are useful and valuable, and increase in interest with each number. Two new series are begun in this number. Levi W. Russell, A.M., Principal of the Bridgham School, Providence, R. I., gives the opening lesson on "Language," and Miss Mara L. Pratt, of Malden, Mass., one on "Primary writing." Mrs. Caroline S. Morgan has prepared an exercise on "The homes of kings and queens," which is expressly designed for grammar school exhibitions. The "Examination cards," Book Table, etc., add much to the practical value of the number.